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# KANSAS MOTHERS' MANUAL



JUNE • 1939



Published by  
DIVISION OF CHILD HYGIENE  
THE KANSAS STATE BOARD OF HEALTH  
F. P. HELM, M. D., Secretary and Editor

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## FOREWORD

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Reports from physicians and others competent to judge, who have used the KANSAS MOTHERS' MANUAL, indicate that it has been a deservedly popular and useful book. Requests for the manual have been made at the rate of approximately 1,000 copies per month, indicating that it has had a prominent part in the education of Kansas mothers. The manual has taught the need of medical supervision for proper prenatal, natal, and postnatal care, thus safeguarding the mother and her child.

The book is not intended to take the place of a physician. It is written with the idea that it may assist the physician in his verbal instructions to expectant mothers, and may supplement and explain such information. It aims to show the importance of the expectant mother's consulting her physician as soon as she learns she is pregnant, and the necessity of regular visits to the physician in order that prenatal conditions may be checked for the avoidance of complications, which still claim far too many lives of Kansas mothers.

In submitting the fifth revised edition of the MOTHERS' MANUAL, we trust it may meet with the approval of the physicians of Kansas and that it may aid them in educating mothers along lines of possible safety for motherhood and in infant care. We hope the manual may have a part in reducing the maternal and infant death rates in Kansas.

We are pleased to offer this manual to expectant mothers, physicians, health officers, nurses and to others interested in maternal welfare.

Please address all requests to the Child Hygiene Division, Kansas State Board of Health, Topeka, Kan.

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## ANNOUNCEMENT

We desire to express grateful acknowledgment to the maternal and child-welfare committee of the Kansas Medical Society, to other members of the medical profession in our state, and to the Federal Children's Bureau, for many valuable suggestions in the revision of this book.

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PREGNANCY

The Signs of Pregnancy

Part I

CHILDBEARING

(5)

## Chapter I

### PREGNANCY

#### The Signs of Pregnancy

It is sometimes a difficult matter to diagnose early pregnancy. Usually, however, the following signs may be taken to mean that pregnancy probably has occurred:

1. *Stopping of the period, or menses.* In a healthy woman who usually menstruates regularly this is a strong indication that pregnancy exists.

2. *Morning sickness.* Vomiting on an empty stomach or after the first food is taken in the morning, when the digestion and health do not seem to be otherwise disturbed, is a very common experience in pregnancy. When it appears along with the stopping of menstruation it is rather conclusive evidence. Various degrees of nausea may occur without vomiting.

3. *Enlargement of the breast and darkening of the ring about the nipple.* This usually appears along with the previous two signs and lends strength to the probability of pregnancy.

4. *Visible enlargement of the abdomen is also one of the probable signs.* This occurs at very different times and in different degrees.

5. *Quickening, or feeling life.* This is positive if the woman is absolutely sure she feels this. This usually occurs about midway in pregnancy, or at four and one-half months.

6. *Feeling the baby move.* When the physician or other person lays hands on the abdomen and actually feels and sees the child move, this may be considered to be positive.

7. *Feeling the parts of the body.* When the physician can make out the head and various parts of the child's body, this is also positive.

8. *The heartbeat.* When the doctor hears the baby's heartbeat there can no longer be any doubt. This can usually be heard in the abdomen of the mother about the middle of pregnancy, or at four and one-half months.

There are several laboratory tests which your physician may use to determine the existence of an early pregnancy in doubtful cases.

#### How to Tell Probable Date of Confinement

The length of pregnancy may vary; therefore it is often impossible to compute the exact date of labor. Pregnancy lasts on an average of 280 days. The usual method of estimating the date of confinement is as follows: Count back three calendar months from the first day of last menstruation, and add seven days. For example, if the first day of the last menstruation was October 10, counting back three months would give July 10. Seven days added would give July 17 as the probable date of confinement.

Another method of computing date of confinement may be preferred, viz.: Add 40 weeks, or 280 days to the first day of the last normal menstruation.

Table for Computing Expected Date of Confinement

Jan. Oct.	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	Nov.
Feb. Nov.	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 1	25 2	26 3	27 4	28 5	29 6	30 7	Dec.	
Mar. Dec.	1 6	2 7	3 8	4 9	5 10	6 11	7 12	8 13	9 14	10 15	11 16	12 17	13 18	14 19	15 20	16 21	17 22	18 23	19 24	20 25	21 26	22 27	23 28	24 29	25 30	26 31	27 1	28 2	29 3	30 4	31 5	Jan.
Apr. Jan.	1 6	2 7	3 8	4 9	5 10	6 11	7 12	8 13	9 14	10 15	11 16	12 17	13 18	14 19	15 20	16 21	17 22	18 23	19 24	20 25	21 26	22 27	23 28	24 29	25 30	26 31	27 1	28 2	29 3	30 4	31 5	Feb.
May Feb.	1 5	2 6	3 7	4 8	5 9	6 10	7 11	8 12	9 13	10 14	11 15	12 16	13 17	14 18	15 19	16 20	17 21	18 22	19 23	20 24	21 25	22 26	23 27	24 28	25 29	26 30	27 1	28 2	29 3	30 4	31 5	Mar.
June Mar.	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	Apr.
July Apr.	1 7	2 8	3 9	4 10	5 11	6 12	7 13	8 14	9 15	10 16	11 17	12 18	13 19	14 20	15 21	16 22	17 23	18 24	19 25	20 26	21 27	22 28	23 29	24 30	25 1	26 2	27 3	28 4	29 5	30 6	31 7	May
Aug. May	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	June
Sept. June	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	July
Oct. July	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	Aug.
Nov. Aug.	1 8	2 9	3 10	4 11	5 12	6 13	7 14	8 15	9 16	10 17	11 18	12 19	13 20	14 21	15 22	16 23	17 24	18 25	19 26	20 27	21 28	22 29	23 30	24 31	25 1	26 2	27 3	28 4	29 5	30 6	31 7	Sept.
Dec. Sept.	1 7	2 8	3 9	4 10	5 11	6 12	7 13	8 14	9 15	10 16	11 17	12 18	13 19	14 20	15 21	16 22	17 23	18 24	19 25	20 26	21 27	22 28	23 29	24 30	25 1	26 2	27 3	28 4	29 5	30 6	31 7	Oct.

To use the table, find in the upper line the date of the last menstruation; the figure below will indicate the date when the confinement may be expected. If the date of first day of menstruation is January 10, then the date of expected confinement will be October 17.

## Chapter II

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### PRENATAL CARE

The best protection a woman can have at childbirth is good care by a physician. Next to this comes intelligent personal care by a nurse, and good help in her home.

The Federal Children's Bureau has made many investigations as to why women and babies lose their lives or their health at childbirth. After studying the results of these investigations and consulting the best health authorities of the United States, the Bureau has formulated certain standards of professional care as being necessary for the protection of the life and health of mothers and babies. These standards are embodied in the following advice:

#### Medical Care

1. Select the best physician available and consult him as soon as the fact of pregnancy becomes known. Otherwise, he cannot be expected to prevent complications. The physician will make a complete physical examination and perform such laboratory tests as are indicated, including a Wassermann test and a urinalysis. The Public Health Laboratory of the State Board of Health, at Topeka, will perform a Wassermann test free of charge for any pregnant woman.

2. If this is the first pregnancy, or if the patient has not had a living child, the physician will take pelvic measurements to make sure that the birth canal is normal.

3. Once a month take to the physician six ounces of fresh urine in a clean, scalded bottle. From and after the seventh month a specimen of urine should be tested once every two weeks.

4. When the urine is taken to the physician he will also test the blood pressure. Certain very serious complications give warning in the urine and blood pressure in time for correction. If these warnings are overlooked, convulsions sometimes occur very suddenly, and other serious results, even death of mother or child, or both, may follow. These usually can be prevented by attention to the very first symptoms of trouble.

5. If any of the following symptoms arise, call your physician or go to a clinic for advice at once: obstinate constipation; shortness of breath; colds; sore throat; persistent or acute illness; persistent or repeated headaches; nausea and vomiting after the ninth month; pain in pit of stomach; passing less than three pints of urine daily; severe pain in lower abdomen.

6. In general a woman should expect to feel well and vigorous during pregnancy. If she does not she should make a determined effort to find out the reason and correct it.

7. The average woman of normal weight should not gain more than twenty pounds; the overweight woman may be better for gaining less than that or not at all. An excessive gain in weight is indicative of possible danger.

8. When the child is born the physician will stay until certain that mother

and child are comfortable and safe. Any damage will be repaired at the time of delivery unless there is some serious reason why it is not safe to do so.

9. The physician should, if possible, visit the mother and baby every day for the first five days. If everything is all right he may make a call every other day until the mother leaves her bed. Where distance prohibits this service, the mother should, if possible, go to the nearest hospital or to the home of a relative or friend in order to be near her physician at the time of delivery. The mother and baby should keep in touch with the physician until the infant is six weeks old. The mother and baby should then visit the physician's office, where the baby should be checked as to his weight, progress and general condition, and the mother should be examined. It is important that the pelvic organs be checked to see if they have returned to their normal condition and have properly recovered.

### Selection of a Nurse

If the mother has decided to have the baby at home she will want a nurse. The physician can probably suggest one, as most physicians have on file the names of good nurses who have worked with them. A private nurse should be engaged some time before the expected date of delivery, and as this date is uncertain it is well to have a definite understanding when her pay is to begin. The nurse should visit the home a few weeks before the baby is expected and make herself familiar with the rooms and the arrangements for the birth. She will be needed for a longer or shorter period in different cases; but as it is important that the mother should rest and be relieved of strain for the first weeks after childbirth, it is worth stretching a point financially to keep the nurse as long as she is needed—two weeks at least, and three or four weeks in some cases. In many places, particularly in large cities, a nurse from the visiting-nurse association will come as needed, and is paid only a small fee for each visit. If the confinement is a normal one and there is someone to do the housework, the needs of mother and baby may be provided for in this way very well, and much more cheaply than when a trained nurse is employed for the entire time. Other forms of nursing service may be had in different communities; some are good and some are not so good. But the expectant mother should plan for the best nursing that she can have.

## HYGIENE OF PREGNANCY

### Diet

**General.** The pregnant woman should eat to maintain her health. The diet which was best for her prior to her pregnancy is best for her now. The diet should at all times contain foods which are useful in the building of body tissues. Such foods are milk, eggs, wholegrain cereals, fruits and vegetables. Foods which furnish bodily energy are also needed. These foods are fats, sugars and starches. Vitamins, minerals and fibers needed for roughage are found in fruits and vegetables. The mother supplies these building materials to the growing, unborn baby through the tissues that surround the baby.

**Amount of Food.** The old belief that a pregnant woman must eat for two is not true relative to the *amount of food* she must eat. She need not increase the amount of food until the last two or three months, and then only slightly. She must, however, eat for two in the matter of minerals and vitamins. More

protein food is needed during pregnancy, since it is used to build new body tissues. Nature takes 280 days to develop a baby weighing about 7½ pounds. Furthermore, the ordinary woman may not be as active as usual during at least the latter part of her pregnancy when the child is growing most rapidly. Therefore, we may safely say that the pregnant woman should eat no more than is necessary to keep her strong and well at any other time.

The actual amount of food should be regulated by the condition and activity of the woman. An expectant mother who is not strong and vigorous to begin with, or who must work hard, should eat an abundance of nourishing, easily digested food. One who is well developed, or who is overweight, or who is living quietly and not using much energy, should be careful not to overeat.

The expectant mother needs a proper diet to maintain her body in a normal condition. She must also protect her body by providing the materials necessary for the growth of her baby. If these materials are not provided, the unborn baby will take them from the body of the mother, causing her to become undernourished. In this way the expectant mother may lose calcium from her teeth, resulting in a process of decay. It therefore, behooves the prospective mother to eat the proper food to protect her own body and to build a strong, healthy body for her baby.

**Kinds of Foods.** For health at all times, the diet of the expectant mother should contain foods which serve the following purposes: (1) to build new body tissue and repair worn tissue; (2) provide for the energy needs of the mother; (3) regulate the body activities.

The pregnant woman should eat just as any other woman should eat who would preserve full health and vigor. The pregnant woman should make an effort to eat foods containing an abundance of calcium and vitamin D. This insures good tooth and bone growth in the baby and protects the mother's bones and teeth. She should attempt to keep the amount of sugar in her blood at a normal level. A drop in blood sugar may cause nausea, and an increase over normal needs irritates the lining of the stomach and bowels, causing discomfort.

The diet in pregnancy should be varied and adequate. It should give the mother a generous supply of proteins, minerals and vitamins. Such foods as milk, milk products, eggs, meat, and vegetables furnish the protein or muscle-building foods.

*Milk* and milk products are needed each day. The mother needs a pint of milk for her body and a pint of milk for the baby, so that her body calcium will not be drawn upon. In case the mother has trouble in taking milk as a beverage, she may use milk products, including milk soups, custards, plain ice cream, cottage cheese, cocoa, buttermilk or other milk drinks. Dried milk powder may be added to foods containing milk, thus increasing the milk of the diet. Evaporated milk may be used, since it is more concentrated and gives much nourishment without so much bulk. It may be strengthened by adding vitamin D, which will aid in the formation of bone and teeth.

*Fruits* should be used generously, including fresh fruits, such as oranges and grapefruit, and cooked fruits, such as peaches, apricots, pears and apples. Dried fruits, including prunes, figs, apricots, apples and peaches, may be used. Fruits provide minerals, iron particularly, which are needed in the formation of blood. Fruits help to maintain the digestive organs in a healthy condition.

The acids found in fruits are beneficial, since they increase the alkaline condition of the body, stimulate the appetite and are laxative. Fruits are a good source of vitamins. Oranges, grapefruit and tomatoes furnish vitamin C in good quantities. The pregnant woman will do much to protect her teeth and gums through the frequent use of the fruits which are high in vitamin C content.

*Vegetables* in variety should be used each day. Green-colored vegetables, such as spinach, lettuce, raw cabbage, chard, greens, green beans, okra and peas are especially valuable. These furnish iron and other minerals and are a good source of vitamins. Vitamin A, which is needed to stimulate resistance to infection, is found in green and yellow vegetables. Vitamin B, which is needed for good intestinal health, is found in root and seed vegetables.

*Bread and cereals* should be eaten daily. Wholegrain cereals made into bread or served as wellcooked porridge are valuable for their vitamins and minerals. They help to regulate the bowels, since they contain large amounts of fiber. The quick-cooking cereals, as well as those which require longer cooking, are more palatable if cooked in a double boiler with less stirring. Oatmeal, rolled wheat flakes, graham mush, cornmeal mush, ground wheat, brown rice, and corn grits are all good cereals to use. Two cereals cooked together will give variety. A spoonful of prepared cereal may be sprinkled over the dish of cooked cereal for a change. Dried fruits cooked with cereals make them more nourishing. Brown sugar adds a change of flavor. Wheat germ, which may be purchased at a local mill, will increase the amount of nourishment of breads and cereals. A teaspoonful may be added to the cereal for each person and will provide additional vitamins which are needed. Crusty breads, cornbread and toast are good for exercise of the teeth.

*Eggs* are easily digested and are a good body-building food. They are rich in iron which is needed in blood formation. Ordinarily one egg should be eaten each day in addition to the eggs used in cooking.

*Meats, fish and poultry* may be used, but should be taken sparingly. The more eggs, cheese, milk and peanut butter used the less meat is needed. Meat is eaten to build muscle tissue. It also provides iron, which is needed in blood formation.

*Fats* in the form of butter and cream are best. They are easily digested and help to keep the bowels regular. Bacon may be used to flavor vegetables and a moderate amount may be eaten. Fried foods, however, may interfere with digestion.

*Sugar and sweets* should be used sparingly. Fruits provide a considerable amount of sugar of a healthful kind, as do beets, carrots and sweet potatoes. The more of these foods eaten, the less sugar is needed in desserts and other foods. Brown sugar should be used in cooking at least part of the time. Surplus sugar produces body fat which is usually undesirable. However, a limited amount of sweets should be used during pregnancy.

*Water* should be taken liberally, but not to excess. It is best to have cool, fresh water available at all times and to drink many times during the day. The water should not be too cold. Water may be taken upon arising in the morning and several times during the day. At meal time it is better to drink at the end of the meal, since water at this time will not tend to lessen the appetite. In general, six to eight glasses of water should be taken each day.

**What to Eat Sparingly.** 1. *Coffee and tea*, if used at all, should not be strong and should be used not more than once daily. In general, stimulating foods and drinks should be used very sparingly.

2. *All desserts* should be very simple and used only occasionally to alternate with fruits. Sweets and pastry are unnecessary if fruit of some kind is eaten at every meal. Sugar may be used sparingly to flavor cereals, coffee and tea. Honey, molasses and natural syrups may also be used moderately.

3. *Meat* should be used with caution; only small portions, thoroughly chewed, and not more than once a day or every other day. The waste products of meats must be eliminated from the body by the kidneys. No unnecessary work should be thrown upon the kidneys during pregnancy. Eggs are excellent as a building food and may be eaten instead of meat several times a week.

4. *Pickles, relishes and condiments.* If plenty of fresh vegetables are eaten, especially in the form of salads, such as coleslaw, vegetable salads, with either French dressing or boiled dressing, and if the food is all well cooked and palatable, relishes and condiments will not be necessary in order to make eating interesting.

5. *Women who are overweight* or who tend to take on fat during pregnancy should eat sparingly of starchy food and sweets.

**Things Which Should Not be Eaten.** 1. *Anything which is known to disagree with one ordinarily.* Almost everyone knows that certain foods are hard for her own stomach to digest, although others seem to eat them with safety. It is foolish to take chances on upsetting the health during this important period by indulging in such foods.

2. *Warm, soft or fresh breads* should not be eaten. Thoroughly baked bread, toast, zwieback, rye, corn or Graham breads with heavy crusts are better for the health and teeth. All flour should be very well baked, otherwise its starch is difficult to digest. The use of insufficiently cooked starch and flour tends to cause gas and "heaviness" after eating.

3. *In general, fried, overcooked, undercooked, greasy, overseasoned, or overly rich foods* should not be eaten. They overtax the digestive system and give little in return.

4. *Pastry, pie, rich puddings, candy and soda-fountain productions, especially Coca-cola* should be ruled out entirely.

**Manner and Time of Eating.** 1. The pregnant woman should eat very slowly and chew thoroughly. This is the best way of preventing gas, bloating, "water brash," "heartburn," "fullness," and other discomforts. This makes the work of digestion much easier.

2. Women who suffer from nausea or who find their digestion to be easily upset at this time, or who suffer from a sense of pressure and fullness, should eat sparingly at meals and take a light lunch midway between meals, with a glass of hot milk at bedtime.

The normal woman in good health should eat regularly and confine herself to three meals per day.

3. Every woman should be sure to drink from six to eight glasses of water a day.

**Special Diets.** No pregnant woman should undertake to restrict her diet for the purpose of having an easy childbirth, except under definite instructions

from a physician. Otherwise she runs a risk of doing injury to herself and her child.

**Cravings.** Pregnant women sometimes crave curious things to eat. This means that they have not been eating a well-balanced diet; usually it means a lack of food rich in minerals, such as the mother's blood needs in special abundance at this time. This can be corrected by drinking milk to supply lime, and eating freely of fresh vegetables and fruits, especially leafy vegetables, to supply the other minerals needed in building the body of the baby.

### The Pregnant Woman's Dietary Needs

ARTICLE NEEDED.	Why needed.	Foods supplying it.
Calcium....	To protect the teeth and bones of the mother, and to build the teeth and bones of the baby.	Milk, buttermilk, and cheese.
Iron.....	To protect the mother against anemia and to supply extra iron for the baby to store in its body until it is old enough to eat foods that will supply the needed iron. Iron is needed to form blood for both the mother and baby.	Egg yolk, green vegetables lean meat, liver and whole-grain cereals.
Iodine....	To provide the mother and offspring with iodine for normal development of the thyroid gland, thus preventing a predisposition to goitre.	Salt-water fish, such as cod, halibut, salmon, oysters.
Protein....	To supply muscle tissue for the baby, and to build and repair the muscle tissue of the mother.	Milk, eggs, meat, peanut butter, cereals, and such vegetables as beans and peas.
Vitamins...	To promote normal growth and to insure optimum health. They serve also as protective substances in the diet, preventing certain diseases in both the mother and baby.	Milk, cream, green and yellow vegetables, cereals, fruits, eggs, fish-liver oils, meats and liver.
Fiber.....	To stimulate the digestive organs and to help keep the bowels open.	Whole-grain cereals, fruits and vegetables.

### Exercise, Rest and Recreation

**Amount of Exercise.** Exercise is the law of life. Regular activity is absolutely necessary to keep up the strength and work waste matter out of the tissues of the body.

The expectant mother who has no complication which makes exercise dangerous to her should lead an active life and keep herself fit and her muscles strong by regular, well-balanced work and exercise which will use every part of her body. She should not overuse any one part of the body, nor should she overwork. She should never go to bed at night so tired that she does not get up perfectly rested in the morning.

**Kind of Exercise.** *Housework.* General housework affords good, all-round exercise if well planned and if it can be compassed in a reasonable number of hours.

A strong, muscular woman who is accustomed to hard work may even do washing, ironing, gardening and other hard work up to the later weeks of pregnancy, always providing she feels no ill effects.

*Work and exercise should be varied.* A woman should not sew continuously for a week at a time, nor should she clean house or make garden continuously day after day. She should either give a certain number of hours to each

activity every day, or she should at least alternate days of sewing with days of vigorous exercise.

*Outdoor exercise.* A definite and regular amount of outdoor exercise should be taken every day. There is no tonic like sunshine and fresh outdoor air. The expectant mother owes it to her unborn baby to give him this chance for vigor.

*Exercise for women who do not work.* The woman who does not do her own housework, especially the woman who boards or lives in a small apartment, must take regular exercises, including deep breathing, arm exercises, bending exercises to strengthen the back and abdominal muscles, and should also take daily walks in the sunshine. All exercises should be begun rather gently if one has been unaccustomed to doing them. At no time should violent or jerking exercises be taken.

*To go upstairs properly.* A moderate amount of stair climbing is excellent exercise for any woman who is normal and healthy. To go upstairs without fatigue or strain, stand erect and go upstairs exactly as if walking on a level, except for the extra push necessary to hoist the weight of the body to the next step. Do not stoop; do not hold the breath.

**Cautions.** A woman will not cause the cord to become wrapped around the baby's neck by reaching over her head. Nature has taken care to prevent this by floating the baby in the "bag of waters" and by making the cord so long it cannot be pulled by anything the mother may do. She may, however, cause miscarriage by overreaching or overstraining in any way. Therefore, she should not reach, lift heavy loads, run, or do anything else to excess. She may, however, sleep with her arms over her head, take dishes from the upper shelf, or do anything which will not cause a sense of strain.

A woman may ride moderate distances in carefully driven cars or vehicles, over smooth roads, but there is great danger of producing miscarriage by jolting or jarring if the vehicle is driven too fast or too far over rough roads.

**Rest.** The pregnant woman should break her day's work with frequent short periods of rest. She will get just as much done and will be less tired at the end of the day.

If her work is such that she must be on her feet a great deal, it is especially important that she lie flat on her back on a bed or couch, or even on the floor, with her feet up on a cushion or small box or foot of the bed, for five minutes every hour or two during her workday. This will do much to prevent varicose veins, and will bring her through the day with much less fatigue.

**Sleep.** The pregnant woman should have at least eight hours of sleep at night in a comfortable bed by herself, in a well-ventilated room, or, better still, on a sleeping porch.

If her rest is unavoidably broken by young children, or if she must get up early and does not go to sleep readily at night, she must plan to take a nap after the noon meal. She can often do this by lying down while the toddler takes his nap.

*It should be a matter of conscience with the expectant mother not to let herself get too tired or lose sleep.*

**Recreation.** A pregnant woman should resolve to be happy. She should give herself every possible pleasure in the way of social relaxation, and after

she has made sure that she is becomingly and suitably dressed, she should go about freely to church, entertainments, visits, etc., always avoiding excitement, late hours and fatigue.

We are growing away from the old idea that a pregnant woman should not be seen. One of the inspiring sights at a national scientific meeting a few years ago was a woman with a perfectly radiant face and great dignity of manner who read a paper before this notable assembly just six weeks before giving birth to twins.

It means everything to a family to have a mother who can keep her poise and cheerfulness during this trying time, and it has much to do with keeping up her own courage and strength.

She should not feel selfish in taking enough pleasure and giving herself enough indulgence to make her able to throw off depression and keep herself and all around her happy.

### Marital Relations

The question is very often asked as to whether sexual intercourse should occur during pregnancy, and if so, how often. All medical authorities agree that it should certainly not occur at or near the dates on which the woman would expect to menstruate were she not pregnant, as miscarriage is especially likely to occur at these times.

Intercourse in the middle three months is of less risk than at other times, but it is forbidden absolutely in the last two months of pregnancy because it may bring on childbed fever or premature labor.

Any woman who has had a miscarriage, especially if given to having repeated miscarriages, should refrain from marital relations during her entire pregnancy.

For certain biological reasons, the hardships of childbearing fall chiefly upon the woman. The husband can even things up a little by being as considerate and self-denying as possible during this period of physical, mental and nervous strain upon his partner in the important business of perpetuating their family.

### Clothing

**Clothing for the Mother.** *Dress.* The pregnant woman should carefully plan her special wardrobe so she may have perfect freedom for every part of her body and at the same time appear neat and presentable. Everything should be hung from the shoulders, and skirts and dresses should be adjustable, so that they may be worn during the entire period of pregnancy. The popular one-piece style makes a very practical dress for every day. For special occasions, the two-piece style, with skirt on an adjustable bodice top, is very becoming and attractive. A loose cape or coat is a necessary part of the outfit.

Underwear should be of the union-suit or one-piece style. It should be selected according to the season and the circumstances of the woman, and need not be different from that usually worn by her.

Shoes should have low, broad heels, straight on inner side, and with broad toes. They should be thoroughly comfortable and make walking as easy as possible.

A brassiere that supports the breasts may be worn, but not a flattening one. An abdominal belt made of two thicknesses of muslin, with darts in the

bottom and the top may be worn. Some women like to wear a maternity corset, properly fitted; this should be decided by the physician.

Do not wear round garters or any other tight bands. Side garters may be attached to a waist hung from the shoulders, or a belt that rests on the hip bones or to the abdominal support.

**The Baby's Layette.** An infant's first outfit may be simple and inexpensive, or elaborate and expensive, according to the desire and economic circumstances of the mother. In general, the garments should be very simple and easily washed and ironed. It is a great mistake to use a helpless infant as an object of display. Everything should be planned with direct reference to his comfort and well-being.

The following is a minimum outfit. It may be more generous in number of pieces and finer in texture if circumstances permit. The number of pieces should be sufficient to make it possible to keep the baby sweet and fresh. The frequency and ease with which the laundry work may be done determines in the main the number of pieces necessary. The following list assumes that diapers and underwear may be washed frequently, while the outside slips are washed only once a week.

*Three abdominal bands.* The plain, knitted ones are inexpensive, comfortable and easily laundered.

*Three shirts,* size 2; cotton, silk and wool, or cotton and wool mixed. There is one style which crosses over the chest and fastens in the back by two tabs. This style adapts itself to the size of the child as it grows, is easy to fasten, and fits without wrinkles if properly put on. Nonwrinkling tape may be used for fastening instead of pins.

*Three petticoats,* "Gertrude" style, which is a one-piece sleeveless garment, fastened by a button or tapes on each shoulder. These may be made of muslin or flannel, according to season, and should be 20 inches long finished.

*Three nightgowns,* made of soft outing flannel or muslin, 27 inches long, with a draw-string in the hem.

*Three dozen or more diapers,* made of good quality bird's-eye cotton, 21 x 27 inches. This cotton should be thoroughly laundered before being used.

*Eight dresses,* of nainsook or Persian lawn or soft dimity, made kimono style and with little or no trimming, 21 inches long finished.

*First cloak*—a sleeveless square with hood attached, which may later be shaped into the first coat. Eider down with silk lining is ideal for a cold-weather baby; any soft cashmere or other wool if a summer baby.

*Cotton stockings,* three pairs.

*Carriage blankets,* according to climate.

*Three knitted cotton bands,* size 2, should be purchased and substituted for the torn strips as soon as the navel is thoroughly healed and the child's abdominal muscles seem strong and normal.

*A couple of small flannel or crocheted jackets* will be found very useful to slip on at times when the room is cool.

**The Style and Manner of Making.** The following rules should be rigidly observed in making the layette: have as few seams as possible; use simple kimono patterns without yokes and as nearly one piece as possible; use no trimming on necks or any place where it can possibly feel rough to the deli-

cate skin of the baby; instead of buying lace and trimming, spend that much more for fine, soft material; instead of tucks and embroidery, spend that time in finishing seams and bands with exquisite neatness, using great care that every edge and seam shall be perfectly soft; machine-made bands are often stiff, and sometimes rough; the seams of the nightdress should all be opened on the outside of the garment and catch-stitched down with fine thread, leaving the entire inner surface soft and smooth; the kimono style is good for all the first garments, because this does away with the arm seam and simplifies the making; the sleeve may be gathered at the wrist with a soft, silk-faced casing, or a hem and a fine ribbon or silk tape.

*In general* the clothing of both mother and baby should be simple and attractive, but not elaborate. It is a great mistake for an expectant mother to spend so much time making a beautiful layette that she does not take time to go into the open air and take the exercise and recreation and rest which are necessary if she is to build a healthy body for her child.

### Care of Person

**Bathing.** A daily morning sponge bath, shower or quick plunge in a tub is most refreshing, stimulates the circulation, improves the appetite, and makes one less liable to take cold. However, during the last months of pregnancy, no tub baths should be taken because of the danger of carrying infection into the vaginal tract. Sponge bath or shower bath may be continued. The temperature of the water should be agreeable to the individual; tepid to cool is preferable. It is the wetting and the rubbing which do the work of stimulating the skin.

In addition to the morning rub, a warm soap scrub should be taken at least two or three times during the week, preferably at bedtime.

Much waste is eliminated through the skin if it is healthy and active. This relieves the kidneys of part of their load.

Bathing makes the complexion fresher, and even the mind more cheerful, if one has a fastidious sense of bodily cleanliness and freshness.

**Care of the Teeth.** The teeth should be carefully brushed at least twice daily, using salt and soda or milk of magnesia in order to counteract the tendency to acidity which is often present during pregnancy.

**Care of the Breasts.** During the last two months of pregnancy special attention should be given daily to the thorough bathing of the nipples with soap and hot water. Follow this with cold application and gentle massage. If the nipple is very small or inverted it should be pulled out and shaped and rubbed in order that it may be more convenient for the baby to grasp it.

Your ability to nurse your baby is largely a matter that lies in your own hands. You must wish so earnestly to nurse your baby that you are willing to seek and follow the advice of your physician covering your plan of life and your mental and physical health, both before and after the baby is born.

The breasts and nipples may require some special attention. It will be well to have the physician observe the condition of the nipples about two months before confinement, in order for him to determine whether or not they require special care. If the nipples seem particularly sensitive he may recommend a

lotion to toughen them. If they are inverted he may give you instructions about drawing them out.

If crusts appear on the nipples do not pick them off, because an infection may result from this. Olive oil or vaseline will soften the crusts, and at bath time they will come off easily. If the breasts are heavy wear a brassiere that supports from below but does not bind.

Breast milk is the natural food for the baby. It is easily digested, cheap, clean and convenient. No other one thing has more pronounced influence on the development of the baby and on his health during his entire life than nursing at his mother's breast. Breast feeding also gives the baby the best chance for life and for steady and normal growth.

**Care of the Abdomen.** The skin of the abdomen becomes stretched during the later stages of pregnancy, and sometimes breaks into "striae," or scars, which remain as a disfigurement. In some cases the muscles remain lax and soft after delivery, and we say the woman has "lost her shape." Something can be done to prevent both these effects of stretching by rubbing the abdomen every evening after retiring, or every day after the bath, with cocoa butter or cold cream or other lubricant, but the effect is probably chiefly due to the rubbing. If the muscles are much overstretched a well-fitted muslin binder worn during the last month or six weeks of pregnancy will take some of the strain from these muscles.

### Household Help

The expectant mother should begin early to plan for withdrawal from the work of the household. The life of the family should be systematized and simplified to the utmost, and the various members of the family should be trained to take certain responsibilities, and they should do this early enough to relieve the mother more and more as time goes on. There will then be no sudden explosion of disorder at the time, above all others, when order is most necessary.

If it is possible to have hired help, this help should be brought into the home and the routine adjusted in time to relieve the mother, both mentally and physically, and give her a chance to gather her mental and physical forces together for her confinement.

If it is not possible to have outside help, and the family, grandmother or neighbor must do all that is done, the mother should reduce the work to the lowest possible terms by putting away absolutely everything not actually needed and in use. This means ornaments, books, furniture, rugs, clothing, etc. Leave the fewest possible things to clean. Train the family to take care of not only their own things, but a little more, and plan just what each one is to do and just what the grandmother or neighbor is to do. Go over all this in advance so no one will have to run to the mother when she is ill and ask where things are and how things are to be done.

The ordering of food supplies and general plan of the meals may be cared for some time in advance.

### **Hospital Care**

Many physicians prefer to attend their patients at a hospital. This has many advantages. A hospital is equipped to meet any emergency; it will not be necessary to buy so many things; nursing care is included in the hospital care; by going to the hospital all confusion will be taken out of the home. For the mother it means less worry and more rest, and it may be more economical.

If the baby is to be born at a hospital, engage the room or arrange for a ward bed and find out what the regulations are for entering, and what clothing and toilet articles should be taken for the mother and baby. Have these things ready and packed in a bag a week or two before the confinement.

### **Summary**

In short, the comfort of the family and the mother should be anticipated and arranged for in advance, and the health of the mother should be safeguarded every step of the way. To do less than this is not economical, is not humane, is not efficient, is not safe.

## **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**

## Chapter III

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### DISORDERS AND COMPLICATIONS OF PREGNANCY

**Nausea and Vomiting.** Some women suffer from nausea and vomiting, or "morning sickness." This may occur any time and is annoying and sometimes serious. It usually tends to disappear by the end of the third month. Some women are relieved by taking a hot drink or chewing a piece of dry toast before getting out of bed. Keeping the bowels open by eating strictly anti-constipation diet, and the system flushed by drinking plenty of water, helps to minimize this discomfort.

Some women get relief by chewing something pungent after eating, such as a piece of preserved ginger root. The physician should be consulted, as there are medicines which will give satisfactory relief.

Unless the woman loses food enough that she becomes emaciated and loses strength this nausea does not seem to do any serious harm. A pregnant woman should try to keep up her strength by eating the most easily digested and nutritious food possible while passing through this period. Hot milk, junket, buttermilk, etc., are all good to take immediately after vomiting, as considerable nutrition will be absorbed before vomiting begins again. Often the nausea and vomiting are controlled or lessened considerably if the pregnant woman will eat frequently. It is well to eat three small meals a day, but also to eat small amounts frequently between meals during the period of nausea. The odor of food will produce as much nausea as the taste of food. Therefore it is important to stay away from the kitchen and be outdoors as much as possible to avoid the odor of food. Always have the house well ventilated. It is important to control the nausea and vomiting to avoid loss of weight and unnecessary weakness.

**Constipation.** Many women suffer from constipation during pregnancy. The pressure of the uterus upon the rectum is sometimes the cause, especially where the posture is bad.

*Diet* is the most important factor, and the pregnant woman should eat an abundance of green and leafy vegetables, fresh fruit and wholegrain cereals. Plenty of water is also important—six to eight glasses daily. Exercise should be kept up unless the doctor advises against it. Laxatives should be used with caution, as many cathartic pills contain drugs which stimulate vigorous contraction of the intestinal muscles, and may stimulate the same action in the uterine muscles and cause miscarriage. The physician will prescribe the proper laxative.

*Enemas of soapsuds or warm cottonseed oil* are often helpful and may be used alternately with mild laxatives in obstinate cases. A habit of going to the toilet with absolute regularity is very important.

**Frequent Urination.** This is a very usual experience during the first half of pregnancy. It is caused by pressure of the enlarging uterus upon the bladder. If accompanied by pains of straining, it should be reported to the doctor.

**"Heartburn," "Water Brash" and Indigestion.** The belching of acid fluid after eating sometimes occurs during pregnancy. All bread should be toasted or well dried and eaten very slowly. Potatoes had better be eaten sparingly. Avoid foods fried in grease. Eating very slowly and chewing with great thoroughness will minimize this discomfort; one should also be careful not to overeat.

Although greasy food is especially aggravating in this disturbance, strangely enough, the taking of some form of oil or grease, such as a little cream, a spoonful of olive oil or butter a short time before eating seems to prevent this discomfort in some cases. Little or no fat should be eaten with the evening meal. If satisfactory relief is not obtained by following these suggestions, report the condition to your physician.

**Varicose Veins.** These are caused by the pressure of the developing child upon the large veins in the abdomen, through which the blood must pass from the extremities to the heart. Sitting and lying with the feet upon a chair or pillow, gentle massage of the limbs, help to make it as easy as possible for the blood to get back to the heart. Bandaging with roller bandages of muslin, elastic or flannel will give some relief when the veins become very large. Wearing a well-fitted abdominal support may also help this condition.

A woman who always stands straight and has good muscle tone and good circulation is not apt to have this complication.

**Swelling of the Feet.** Swelling of the feet is sometimes caused by the pressure in the abdomen, just as varicose veins are produced. Instead of the veins enlarging, fluid leaks into the tissues and causes a dropsy-like appearance. The physician should be told at once of the appearance of this symptom, as it may be a forerunner of kidney trouble. The same things may be tried for relief as are described above for varicose veins.

**Hemorrhoids or Piles.** Hemorrhoids or piles are caused from the same pressure which causes varicose veins, or from constipation. Treatment by a physician should always be obtained if possible. The bowels must be kept especially open and free. Any simple healing salve will tend to allay the irritation; also sitting down with hips slightly elevated.

**Muscle Cramps.** Some women suffer from cramps of the muscles of the legs during the later months of pregnancy. When the cramp occurs, vigorous rubbing, or rather kneading the muscles over the bone with the palm of the hand, like one were mixing bread, will give the quickest relief. If a woman is subject to cramps after going to bed she may help prevent these by taking a hot foot bath and rubbing the muscles well before retiring. Muscle cramps may be an indication of certain deficiencies (especially calcium and phosphates). Therefore you should report the condition to your physician.

**Leucorrhea.** There is an unusual amount of local mucous discharge during the first and last months of pregnancy. There is nothing to be done for this except to keep the parts very clean by bathing with soap or soda water. If this discharge becomes very great or becomes yellow or green the physician should be consulted, as it may indicate an infection which should be promptly treated. Never take a douche during pregnancy unless advised by a physician.

**Pruritis.** Pruritis, or itching of the external parts, is sometimes annoying. Excessive leucorrhea may cause itching. Anything which improves the general condition will act favorably upon this. Local applications of soda water will give temporary relief. Bathing the parts frequently with cold water is also recommended.

### Unusual Symptoms

**Bleeding During Pregnancy.** Bleeding during pregnancy always indicates that something is wrong and should be promptly reported to the physician. It may indicate that miscarriage is about to occur, or that the afterbirth has grown in the wrong place (*placenta praevia*). This may cause very serious hemorrhage. The woman should go to bed and keep strictly off her feet until her physician has seen her. No one should neglect this, thinking she is menstruating, even though pregnant. Those women who bleed and still go on to full term are lucky.

**Kidney Disturbance.** The kidneys of the pregnant woman must eliminate the waste of both mother and child, and it is of the greatest importance that they should be kept healthy and active. When the kidneys are unable to eliminate the urea and uric acid and other waste products of the body the woman may suddenly go into convulsions.

The symptoms are dropsy of the feet and hands and puffiness of the eyes, sharp pains in the head, dizziness and floating specks before the eyes, and a general dull, depressed feeling. The skin is apt to look muddy and the tongue to be coated. The urine is scanty and highly colored.

The symptoms usually can be prevented by eating, drinking and exercising properly (as outlined in chapter II, on the Hygiene of Pregnancy). If these symptoms, any or all of them, appear, the woman should see her doctor at once.

Rise in blood pressure, albumin in the urine, and an undue increase in weight appear before the symptoms mentioned. For this reason the urine should be examined regularly and the blood pressure taken at the same visit.

### Miscarriage

Miscarriage is especially likely to occur during the second and third months of pregnancy, because the placenta or afterbirth is not firmly attached to the uterine wall until toward the fourth month.

**Symptoms of Miscarriage.** Bleeding is usually the first symptom of threatened miscarriage. The bleeding may be accompanied or followed by intermittent cramp-like pains in the pelvis.

Women have been known to go to physicians for medicine to relieve constipation or backache or "bladder trouble," and not say that they were pregnant, or at least suspected that they were. This is taking a serious risk and is an injustice to both the woman and the physician. Any physician or dentist consulted by a pregnant woman should be told of her condition.

**Causes.** Miscarriage may be caused by anything which causes a sudden or forcible contraction of the uterine muscles. A fall, a shock, a fright, heavy lifting, overexertion, particularly sudden exertion, sexual intercourse—any of these may cause this unfortunate accident.

Many times infections tend to cause abortion or miscarriage. Smallpox and syphilis are especially liable to cause this accident. Indeed, syphilis is one of the chief causes of miscarriage and premature birth. Children's contagions are sometimes brought home to the pregnant mother by the school children, and she may forfeit the life of her unborn child. Drugs, especially cathartics, may cause contractions of the uterus when the bowels "gripe," and thus cause miscarriage. There are certain drugs which are used with criminal intent to produce this effect, all of which are very dangerous.

**Treatment.** The first and most important thing is for the woman to go to bed and remain there, with no exertion whatever, until her physician has seen her.

*If violent hemorrhage sets in, the arrival of the physician should be hastened with all speed.* The hips may be raised on a pillow and cold applications used low on the abdomen. The foot of the bed should be raised upon a chair. Save all napkins and discharges for the doctor's inspection.

The patient should not raise up or exert herself in any way while the bleeding continues; she should have absolute quiet until the physician has pronounced it safe for her to get up. She must not even get up to urinate or move the bowels, and after severe hemorrhage should even be fed and turned.

*After a miscarriage a woman should remain in bed for ten days and receive the same care as if she had had a normal childbirth.* More ill health follows miscarriage than childbirth, largely because women do not commonly realize the importance of taking care of themselves.

### Danger Signals of Pregnancy

#### Report to the physician at once:

Persistent nausea or vomiting continuing after the third month and such symptoms, if severe, before the third month.

Persistent or severe headache.

Dizziness.

Swelling of the hands or feet.

Blurring of the sight or spots before the eyes.

Puffiness under the eyes or elsewhere about the face.

Decreased urination.

Persistent backache or neuralgic pains, especially about the pit of the stomach.

Lessening or stopping of the movements of the baby after they have begun.

Bleeding or bloody discharge.

Pain in the lower back followed by cramp-like pains in the lower abdomen.

## Chapter IV

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### TUBERCULOSIS AND PREGNANCY

Tuberculosis is an infectious disease which takes its greatest toll during the relatively early years of the average life span. It is, therefore, proper that it should be discussed in this manual, which is to serve the prospective mother and the mother of children.

Forty years ago tuberculosis was most commonly known as "consumption," and the common advice at that time was "go west and get well." Today, with modern knowledge of the disease, we see less of the condition known as consumption and, above all things, we advise *rest* as the first and most important part of getting well.

In the first ten or twelve years of life there is very little difference in the number of deaths from tuberculosis among males and females. However, for the next fifteen to twenty years we find that there are approximately three females dying of tuberculosis to every two males. After about thirty years of age we find that there are more deaths among males than among females. During the entire life span deaths among the two sexes are approximately the same, with possibly a few more among males.

It can, therefore, be seen that from the time a girl is in high school until she reaches thirty years of age she is more apt to develop tuberculosis than during any other similar period of time in her life. This is of particular importance when we realize that the vast majority of young mothers are within this age group. Bringing children into the world calls upon the mother for a great amount of energy and stamina. Many a young mother has developed tuberculosis within six months after the child's birth, and if there had been no pregnancy, with its subsequent drain upon reserve power, in all probability there would have been no resultant tuberculosis.

It is the duty of every mother and every prospective mother to be sure that she does not have tuberculosis. An ordinary physical examination of the chest is not sufficient. Included in her prenatal care every woman should have not only a chest examination, but a tuberculin test and an X ray of the chest if the tuberculin test is positive. A positive tuberculin test in itself does not mean that the individual has tuberculosis. In fact, probably less than two percent of all who give a positive test actually have tuberculosis. Nevertheless tuberculosis develops in that group which has a positive tuberculin test, *i. e.*, a tuberculous infection, and an X ray of the chest is highly desirable. The old adage "it is better to be safe than sorry" is quite fitting at this time. If there is a positive reaction present and an X ray taken before the child is born, which does not reveal any evidence of active tuberculosis, we strongly urge that another chest plate be made within a period of six weeks to three months following delivery. If, after delivery, the mother does not improve and return to normal health within a few weeks, tuberculosis must be suspected, even though there is no cough or loss of weight or other symptoms commonly associated with tuberculosis.

Early tuberculosis quite frequently, in fact, most frequently, does not manifest itself by the presence of symptoms. Tuberculosis can be discovered by modern methods before symptoms appear. Most cases of tuberculosis with symptoms are moderately advanced and require a much longer time to arrest the progress of the disease. Early tuberculosis can be cured; advanced tuberculosis does not have such a rosy outlook.

A careful physical examination, the tuberculin test and an x-ray are all necessary before one can be sure that tuberculosis does not exist. The prospective mother owes it to her child to be free of disease so that she can care for her offspring. Tuberculosis has broken up many families and will continue to do so until we are all willing to make every effort to find out if the disease exists. Children living in intimate contact with an active case of tuberculosis frequently develop this disease. Tuberculosis meningitis, which is sometimes called "brain fever," practically always occurs in a family in which the mother or father or someone in the household has an active case of tuberculosis.

Every child has the right to be tuberculin-tested at intervals throughout his entire life. One out of every five children who give a positive reaction to the tuberculin test at the age of four or five years will possibly develop tuberculosis sometime during life. Not more than one percent of the entire population develops tuberculosis. Thus it can be seen that the child who gives a positive tuberculin test is twenty times more apt to develop tuberculosis than is the general population. Nearly all of these infections in the five-year age group occur through contact with an active case of tuberculosis among those within the household. If a child gives a positive tuberculin test, a relentless search should be made for the active case of tuberculosis which caused this infection. One should begin first in the household and then consider other relatives, friends, neighbors, etc., until the active and unsuspected case has been found. Only in this way will it be possible to break the contact with the active case and allow the body to heal the infection which it has received.

### **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**

## Chapter V

### EQUIPMENT

#### Nursery Equipment

*Bed or bassinet.* A new rectangular basket or splint delivery basket makes an ideal bed for the first six months. This should be not less than 30 inches by 20 inches in size and may be nailed to the seat of an old chair without a back and the whole thing painted white. A fitted muslin lining which may be removed, with a wide flounce of dotted Swiss around the edge, makes a bassinet dainty enough for any baby.

A rather small pillow may be carefully crowded into this basket so as to give a smooth, flat surface.

A piece of oilcloth or rubber sheeting should be placed over the pillow.

A thin mattress should next be made by folding a piece of table felting or quilted mattress padding, or even a piece of very clean old quilt, to fit the basket. This gives the smooth, firm surface desired, and is easily washed and renewed.

Four blankets may be made by tearing a soft old woolen blanket into quarters and binding or crocheting the edges. They should be one yard square.

Half a dozen large, soft old towels. If these are not found in the family linen, they may be made from wide diaper cloth.

Four wash rags may be made of shaker flannel or bird's-eye or from an old linen towel.

A hot-water bag with flannel cover. (The family bag may be carefully scrubbed and cleaned and fitted with a dainty cover in honor of this service.)

A low chair without arms. The legs of any chair may be sawed off and the chair painted to match the bassinet, if so desired. A low sewing rocker makes a very comfortable mother-and-baby chair.

A folding sewing table or other table, with legs sawed to make it a convenient height for holding the bath things while the mother sits in the low chair. This, also, may be painted white. A folded cotton blanket or a heavy bath towel should be provided for the top of the table.

An enameled foot tub or infant's bathtub.

A reliable scale for the weekly weighing.

An enameled pitcher and hand basin.

An enameled tray, holding: Castile or other mild soap in a celluloid box; fine talcum powder containing no stearate of zinc; boric-acid solution, boiled and strained through cotton; bottle of sterile olive oil; small jar of applicators, made of toothpicks wound with cotton; package of sterile dressing for cord; small and large safety pins.

A low drying rack for the diapers and bath things.

### The Mother's Equipment

If it is left to the mother to prepare all the necessary equipment for the delivery of her child, she should have the following things on hand, in addition to the regular household equipment for illness:

1. One or two pounds of absorbent or surgical cotton; ten yards cheesecloth or surgical gauze or dairy cloth; two rolls cotton batting.
2. If the items in paragraph 1 are prohibitively expensive, provide a large supply of clean old rags for making sanitary pads, with a quarter-pound package of surgical cotton for the small wipes.
3. If the abdominal binder is to be worn, two should be torn from heavy-weight muslin, about 16 x 40 inches; longer if the woman is large.
4. A generous supply of hand towels, at least one dozen. The new diapers may be sterilized and used if the family supply of linen is short.
5. Two or three hand basins or wash bowls.
6. Two pitchers for holding hot and cold sterile water.
7. One slop jar, bucket or foot tub for receiving waste; one basin for the placenta.
8. Large pile of newspapers.

From the home medicine cupboard the following things will be used: Bed pan; irrigating or enema can or fountain syringe; rubber sheet or square of oilcloth; hand brush; sterile vaseline; bichloride of mercury or carbolic or lysol solution; clinical thermometer.

**Preparing Supplies.** From an old sheet tear pieces suitable for pinning the following into packages:

Three sheets, each wrapped separately; three pillowcases in one package; six packages of two towels each; twelve packages of four sanitary pads each.

One package containing fifty cotton pledgets or "wipes" for use during labor to sponge away discharges.

One package of four-inch gauze squares for dressing the cord.

Two nightgowns, wrapped separately. One pair of long stockings may be wrapped with one gown.

Six small or two large pads, wrapped separately, for protecting the bed during delivery.

*Sanitary pads.* Sanitary pads may be made from the cotton batting cut into sections, 4 by 8 inches, faced with a layer of absorbent cotton cut the same size, as the cotton batting will not soak up discharges. The cotton is then wrapped in pieces cut from the gauze, cheesecloth or dairy cloth and made 10 to 12 inches long.

In the absence of the cotton, ordinary menstruation napkins may be folded as usually worn, and each one covered with a layer of old muslin. If there is an insufficient supply of these, old rags and muslin may be freshly boiled and ironed and made into pads of approximately 4 by 10 inches.

*Delivery pads.* A piece of mattress padding or table felt four and one-half yards long may be purchased and cut into six pieces and bound. These may afterwards be thoroughly laundered and used for the baby's bed. Or the pads for protecting the bed may be made from layers of the two kinds of cotton "tacked" between layers of cheesecloth. These may be made a yard square, and two will usually be sufficient. In an emergency pads may be made of

many layers of newspapers basted between muslin and thoroughly ironed on both sides with a very hot iron.

*Pledgets or "wipes"* are made from either gauze or cotton loosely shaped into a mass the size and shape of an egg. The raw edges of the gauze are tucked in, and if made of cotton it is shaped and twisted into a rather firm, round mass. There should be a generous supply of these for wiping away blood and discharges and for use in case it becomes necessary to sew up a tear in the perineum. These also may be made from small pieces of soft old rags.

*Small pledgets* are made by picking off and shaping small bits of cotton and dropping them in a pint Mason jar which has been boiled. These are useful for washing the nipple before and after nursing and the baby's eyes in making the daily toilet.

*Swabs* are made by winding bits of cotton about the ends of toothpicks. There should be a jelly glass full of these.

*Old rags.* A fund of freshly washed rags should be tied loosely in a pillow-case and baked for an hour in a slow oven. These come handy for many purposes at confinement.

**Sterilizing.** Arrange as large a table as possible by padding all over with a clean old blanket or quilt; cover this completely with a freshly laundered sheet. Scrub the irons with soap and water, especially the handles; use a freshly ironed towel, folded, for an iron holder. Place all supplies to be sterilized on a chair or table at one side. Now put on a freshly laundered dress or large apron, scrub the hands thoroughly with a stiff brush, soap and hot water. Take several rows of pins from a paper, place them in a dish, and bake them in the oven.

First run the iron over the entire table in order to sterilize the working surface. Now iron the pieces of old sheet which are to be used as covers, and pile them upon the back of the table. Then iron the towels, and as soon as two are ironed put them in one of the pieces of sheet and pin together, making a neat package, and so on until all the articles have been ironed and pinned, remembering to bury all but the head of each pin in the package. *Use an iron as hot as can be used without scorching, and rub it over and over each article, ironing it several times on each side.*

Arrange that there may be no interruption while doing this, and *do not touch anything whatever except the iron and the supplies.* When done the supplies will be arranged in a neat pile of packages on top of the table. Now fold the ironing sheet over the whole thing, pin compactly and put away until needed. Do not open this package for any reason whatsoever. The nurse will open it at the time of confinement.

This sterilizing should be done two or three weeks before confinement is expected.

The gauze or cotton pledgets, swabs, safety pins, and everything which cannot be sterilized by ironing, should be placed in Mason jars, covered jelly glasses or other suitable containers which have been boiled, covers and all, and dried with dry heat. When filled they should be placed in an oven and kept at a low baking heat for an hour.

The Federal Children's Bureau, in the pamphlet on "Prenatal Care," gives the following directions for sterilizing supplies:

**"HOW TO STERILIZE.** It is possible to sterilize the dressings in the oven, but as dry heat is less effective than moist heat, and there is danger of scorching by this method, it is better to use steam. To accomplish this, the smaller things may be sterilized in a large kettle or saucepan, and the larger ones in the wash boiler. For the first, invert a bowl several inches high in the bottom of the kettle. On this bowl lay a plate, and on top of this place the dressings. They may be put into a cheesecloth bag for ease in handling. Let the water just cover the bowl, and cover the kettle tightly. The articles should remain for one hour after the water begins to boil. To sterilize in the boiler, a convenient method is to suspend the dressings in the steam by means of a hammock made of stout muslin, which is merely a strip somewhat longer than the boiler, so that it will hang down to about a third of the depth of the boiler. It must be fastened securely to the handles of the boiler by means of a stout drawstring run through each end, and, for additional security, down each side as well. The boiler should be filled about one-quarter full of water. If the dressings are placed in loose cheesecloth bags it will facilitate handling them. After the articles have been put in the hammock the boiler cover should be put on and the articles left to steam for an hour, when they may be removed and dried thoroughly in the sun by pinning the bags to the clothesline, or, if that is not possible, they may be dried in the oven, being very careful not to burn them. They are then to be put away in a closed drawer until needed."

### **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**

## Chapter VI

### THE BIRTH OF THE CHILD

#### Signs of Approaching Labor

There is a great difference in the ease with which women have their babies. Some deliveries are very difficult, some very easy for the patient. The physician can help greatly in easing the pain of labor, but he cannot safely eliminate all pain in long or difficult cases, as some lay writers in current magazines would lead women to think. There is no doubt that in some instances great damage has been done to the mother or to her baby by carrying too far the efforts to make the delivery painless. Select a reputable ethical physician to attend you, and follow his advice carefully, and try not to be influenced too much by hearsay or enthusiastic writings of laymen not familiar with the conditions.

Labor usually begins with dull pains or twinges in the lower abdomen or in the back, occurring at regular intervals. These gradually become more severe and more frequent. The first warning, however, may be a slight bleeding, a blood-tinged discharge, or sometimes a sudden gush of water. When any of these signs appear notify your physician. Start for the hospital, if you are to be confined there.

#### Preparation for Labor

**The Room.** The room to be used should be a sunny one, near running water and should have been thoroughly cleaned and kept in order for some time. Things which will not be needed should be removed from the room. The belongings of other members of the family should be removed. For two weeks this room is to belong exclusively and absolutely to the mother. If necessary the nurse and baby may also share it. It is much better, however, for the nurse and baby to occupy an adjoining room. When labor begins the birth chamber should receive a final setting in order. The supplies should be laid out on a table in their packages. The bowls and pitchers should be washed with hot soapsuds and wiped all over with a piece of gauze wet in an antiseptic. They should then be arranged on another table.

The room and furniture should be wiped with a clean, damp cloth. The light should be put in order and a strong extra light made ready in case it is necessary to deliver the baby at night.

The heat and ventilation should be carefully arranged. The baby's blankets, first clothes, bath equipment, the solution for the eyes, the oil for the first cleansing may all be laid out in an adjoining room, or wherever the nurse plans to give the baby his first bath.

A single bed, elevated on wooden blocks, so as to bring the bed 30 inches from the floor, will make delivery and aftercare easier for the attendants.

Place a mattress pad or folded quilt over the mattress, then the sheet; fold under at the corners and pin to the mattress underneath with large safety

pins, taking several stitches with each pin, so it will not tear either mattress or sheet.

Across the middle of the bed place the piece of rubber sheet or oilcloth, which is kept in the home medicine closet, but which should have been wiped on both sides with an antiseptic solution. Place over this a clean sheet folded once crosswise. Fold the ends well under the mattress and pin with other safety pins. This is a drawsheet. The patient's hips should come about the middle of this sheet. It is much easier to change this sheet often than it is to change the sheet over the entire mattress.

Over all this should be spread a large piece of oilcloth and another clean sheet, which will be slipped out from under the mother, leaving her on a perfectly clean permanent bed. The package of pads for protecting the bed may be placed near. The pan or jar for waste may be placed on the floor just under the edge of the bed. A basin should stand by the side of it for receiving the placenta, or afterbirth. Everything brought into the room should be absolutely clean and sterile.

**Preparing the Patient.** As soon as labor is known to have begun the patient should take a large soapsuds enema. She should empty the bladder frequently.

(*Caution:* A vaginal douche should never be used either before or after confinement without explicit orders from a physician.)

She may then take a thorough sponge bath, or this may be given to her by her nurse. She should not get into a tub, because she may infect the birth canal with the water in which the body has been bathed.

She may then put on a clean nightgown, her bedroom slippers and kimono. She may occupy herself in any way she likes in moving about and attending to small concerns, which may make the trying time pass more rapidly. She should eat and drink as if nothing were the matter, except that the food should be easily digested and of a moderate quantity.

The nurse should come early and have everything in readiness. Up to this point the expectant mother and the family may have arranged things. The family should also scrub a boiler very clean inside and out and put it on the stove, filled with clean water. When this has really boiled for five minutes a couple of large sterile pitchers should be filled, covered with a perfectly clean towel and placed where they will cool. Plenty of hot water should be kept on hand. If a teakettle can be spared or an extra one borrowed, it may be put on to boil, then set aside to cool. This is even better than a pitcher.

The nurse should further prepare the patient by scrubbing the inner surfaces of her thighs, the abdomen and external genitals with a brush and soap. She should then shave the hair or take a pair of sharp shears and clip the hair as short as she can. The nurse should next wash with an antiseptic all parts which are to be exposed. She will then put a sterile pad over the vulva and fasten it, back and front, to a bandage belt. When to call the physician at the time of labor, if the patient is to be confined at home, depends upon the distance, circumstances of the weather, and individual variations. It is difficult to make generalized statements covering all cases.

**When the Physician Comes.** The nurse should bring a basin of hot water, soap and hand brush and nail file, and let the physician scrub his hands

outside the delivery room. She should then have a sterile gown or sterile sheet ready to cover his clothing and a basin of disinfectant for his hands. When he has made the first examination the nurse should have water, soap, brush, disinfectant and towel again ready for his use. If he uses rubber gloves she will sterilize these after each using.

### **Tying the Cord**

It occasionally happens that the physician does not reach a country mother until after the baby is born. This is naturally terrifying if no one is present who knows what to do. It is important for everyone to be calm and realize that this is a sign the birth is probably a normal one and that nothing serious is going to happen to either mother or baby. The first thing to do is to see that the baby breathes, and the next is to place it on its side, facing the mother, near enough not to stretch the cord but out of the way of the discharges. Wrap the baby in a warm towel and blanket and wait until the placenta is expelled. Make the mother as comfortable as possible, and watch the baby closely; also watch the mother for hemorrhage. The placenta usually is expelled in twenty to thirty minutes, but it may take longer. In case the expulsion of the placenta is delayed or the condition of mother or baby indicates haste, the cord may be cut as soon as it stops pulsating or beating.

In the meantime boil two pieces of soft, strong cord or small tape about six inches long, and a pair of shears; lay on a clean plate in a hot oven and dry.

When the placenta has been expelled, scrub the hands well with soap and hot water, tie the cord firmly, wrapping the string twice about the cord, and tying with a sailor's knot or three common hard knots. Do not cut the string too short.

Tie once about two inches from the body and again about three inches from the body, or an inch from the first tie. Cut the cord between these two knots with the sterile shears, place a piece of sterile gauze over the stump, and do not touch the stump of the cord. The shears may be made sterile by being immersed in boiling water three minutes.

### **The Baby's First Bath**

The first step in cleansing the baby is to rub the entire body with warm olive oil. The water should feel pleasantly warm to the bare elbow of the nurse. The nurse spreads a bath towel, covered with an old, soft linen towel, over the bath table. She carefully wipes off the oil, carrying with it the cheesy covering of the skin. She should first wash and wipe the baby's face and head, taking care not to get soap in the eyes. She then bathes the body thoroughly and wraps the towel loosely around it while she pats it dry, taking especial pains to dry each fold and wrinkle of skin. Sometimes the physician will advise that the baby be cleaned with oil for the first time and not bathed in water. If the baby is not in good condition this is always advisable.

**The Cord.** The nurse dresses the cord by cutting a hole in a pad of sterile gauze. She bathes the baby and applies the dressing without touching or exposing the cord, if possible. If it has been exposed she sponges the cord

with alcohol or other antiseptic, dries it carefully with dry, sterile gauze, slips the cord through the hole in the gauze, covers it with another piece and adjusts the baby's band. *Grease or salve or powder of any kind should never be put on the cord.*

To adjust the band place it under the baby, lap smoothly in front and pin with small safety pins placed close together, beginning at the bottom. Pin to fit the shape of the body, and fit without wrinkles; it must not be tight. With a plump baby it is sometimes necessary to pinch up little darts at the lower edge and fasten with safety pins.

If the cord is dry and sterile when dressed it should not need to be redressed until it comes off at the end of six or seven days. The baby must not be put in a bath until the cord drops off and the stump has healed. Of course it must receive a sponge bath every day. If there should be any discharge from the cord it must be redressed, and this condition should be reported to the physician.

After the cord drops off, a pad of sterile gauze will be kept over the stump until it is entirely healed.

### The First Nursing

The physician will give instruction as to how soon the baby will be brought for the first nursing. This is the beginning of forming proper habits for the baby. After the first nursing the baby should be put to the breast every six hours thereafter until the real milk comes, and regularly every three or every four hours, as the physician directs.

When the baby is brought to nurse, the nipple should be washed with boric-acid solution or boiled water. The mother should turn on one side and have a pillow thrust firmly against her back to support her. If it is not desirable to have her turn completely on her side the baby may be placed on a pillow so she will not have to turn so far.

### Hemorrhage After Labor

The uterus should contract like an overstretched rubber bag when emptied by the birth of the child. This is nature's way of stopping the bleeding when the placenta is expelled from the wall. The nurse should watch closely that the uterus does not relax while the patient is asleep or resting. In this case violent hemorrhage may set in. The nurse can prevent this by grasping the uterus through the lax abdominal wall and kneading it vigorously. If this does not cause it to draw up, a cold, wet pack or piece of ice may be rubbed over this part of the abdomen. Putting the baby to the breast will nearly always make the uterus contract.

If these efforts do not bring quick results, send for the physician with all haste. While he is coming raise the foot of the bed by placing a chair or other piece of furniture under it. Raise it until the feet of the patient are considerably higher than the head. Keep the baby at the breast and keep kneading the uterus through the abdomen. If promptly and persistently carried out these measures will rarely fail.

**Care of the Eyes of the Newborn**

Chapter 218, Session Laws of 1929, prescribes certain precautions for the prevention of blindness of infants and provides penalties for the violation thereof.

The Kansas State Board of Health will furnish any physician, or any person authorized by law to act as an obstetrician, prophylactic solution for the prevention of blindness.

Immediately after the birth of an infant, the attending physician will instill into the eyes of the infant a drop or two of the silver nitrate solution. Every obstetrician carries the necessary capsules for the protection of the infant's eyes, which should be used in every case. It is harmless and perfectly safe.

**PROTECT YOUR BABY**

1. By vaccination against whooping cough before 6 months.
2. By immunization against diphtheria 9 to 12 months.
3. By vaccination against smallpox before 12 months.

## Chapter VII

### AFTER-CARE OF THE MOTHER

#### The Lying-in Period

**Quiet.** The most important thing in the world for both mother and baby is rest and quiet. Every organ in the mother's body must readjust itself after childbirth. She will take it for granted that everybody is glad she is safely through and that she has a fine boy or girl.

Friends who are wise and kind will show their good will by messages, flowers and thoughtful assistance to the household, but will not expect to enter the sick room while the mother is in bed. Friends who are not this thoughtful, or who do not appreciate the importance of keeping both mother and baby quiet, must be tactfully kept from entering the room and from talking within the mother's hearing.

Likewise the baby should not be handled and exhibited to all comers. It needs only warmth, quiet, fresh air, and clothes that do not wrinkle or pinch.

Most physicians advise two weeks in bed after the confinement. If there are complications, or if a woman does not regain her strength and feel like getting up at the end of the specified time, she should stay in bed longer, with very careful attention to nourishing food and an abundance of sleep.

It is worth everything to the family and to the baby, to say nothing of the mother's own health and happiness, to have her get up well and strong. Family and friends should make every effort and any necessary sacrifice to give mother and child a good start.

Especially should all knowledge and sound of household troubles be kept from the tired mother. Hearing "things go wrong" is more exhausting than hard work, and worry is apt to affect the milk supply.

#### Personal Care of the Mother

**Air, Light and Warmth.** The mother should occupy the quietest, most pleasant room in the house. This room should be light and well ventilated. Sunshine and fresh air are necessary to both mother and child. The room should be kept at not more than 65 to 70 degrees. It is weakening to lie in a hot room. The old method of keeping mother and child in a hot, dark, stuffy room to prevent them from getting chilled was the surest way in the world to keep them weak and make them highly sensitive to chilling.

Both mother and baby must be kept warm, of course, but this must be done with warm, lightweight blankets and hot-water bags, if necessary, rather than with heavy covers and hot, stale air in the room.

In warm weather keep all windows freely open, and in cold weather keep all windows down from the top. Even in the most severe weather a little crack should be left at the top at all times, to make sure that the air in the room will not be stagnant and that it will be constantly changing from the top, where the hottest, stalest air is always found.

The patients may be protected from a direct draught by some kind of a screen. A blanket over two chairs or over a clothes-drying rack serves very well as a screen.

**Diet.** The nurse should ask the physician to give directions concerning the feeding of the mother during lying-in. If this is left to the nurse, the following is about what is usually recommended for normal cases:

For first twenty-four hours, semiliquid diet: milk, cocoa, tea, milk soups, junkets, toast, milk toast, poached egg and fruit. She may have nourishment every four hours.

After the mother has rested she may receive a light general diet, including, in addition to the articles mentioned, cereals, custards, rice, hominy, fruits of all kinds, vegetables of all kinds (except those likely to disagree, such as cucumbers, overcooked cabbage, navy beans, etc.), crisp bacon, chicken, fish, lamb or choice beef, simple puddings, etc.; in short, she may follow in general the diet suitable for pregnancy.

The lying-in mother should take great pains to chew thoroughly, eat slowly and keep cheerful. These factors have quite as much to do with good digestion and the important matter of making good milk for the baby as does the selection of food.

There is no danger that the mother will give her baby colic by eating certain articles of food. What agrees with her will agree with the baby.

**Bowels and Kidneys.** If the bowels do not move regularly every day the physician will advise what to do.

**The Mother's Bath and Bed.** The mother should have a sponge bath every day and have either a fresh gown daily, or at least two gowns, one for night and one for day. The bed linen should be changed often enough to keep it neat and fresh, and the bed should be neat at all times. The hair should be combed daily. It rests both body and mind of the mother to be neat and clean and her room attractive and pleasant.

**Abdominal Binder.** There is a difference of opinion as to the use of the abdominal binder. Some physicians think it tends to cause rather than prevent displacement of the uterus, because it tends to press the uterus backward as the woman lies on her back. Some physicians object to the use of the binder while in bed, but permit its use when a woman first gets up, in order that the relaxed muscles may have some support while recovering their tone and shape. The best plan is for every woman to consult her physician and follow his advice.

### **The Milk Supply**

Carefully regulate the food, sleep and exercise of the mother so that her body will become able to manufacture a normal milk supply. She should take three to four glasses of milk daily in some form or another, and for the rest eat a generous, well-balanced ration. She should drink at least four to eight glasses of water, depending upon the amount of other fluids taken and whether or not the weather is hot. She should get all the sleep she can—the more the better. This is very important. She should spend as much time as possible in the open air and sunshine and should live in fresh, cool, well-ventilated rooms.

Procedure for using a breast pump is best outlined by the individual physician, and the carrying out of his instructions should be done by a nurse or

under her supervision. There is a great tendency among women in general to use the breast pump and manipulate the breast too freely, a practice which may result in permanent injury.

**Caked, Swollen or Infected Breasts.** This should be reported to the physician.

**General Care of the Breasts.** The nipple and breast should be kept dry and clean and covered with a clean, sterile cloth at all times. Common clothing, dust, hands, etc., always contain pus germs. It is very easy for these to set up activity in the small cracks in the tender nipple. As much care should be taken with the breasts during the lying-in period as with any surgical wound.

### **When the Mother First Gets Up**

The nurse should stay for a few days after the mother gets up and help the mother take over her duties, especially if it is the first baby. The mother should bathe and dress the baby several times under the nurse's directions. She should undertake some new tasks each day, according to her returning strength. It is a serious mistake to permit the whole responsibility to fall at once on the new mother. This is apt to upset the milk secretion, and the mother has a fretful, crying baby who keeps her awake, and this still further impairs the flow of milk.

Many times ill health and doctor's bills are the price paid, with interest, for the ill-advised effort to economize by letting all help go as soon as the mother can get on her feet.

The family's schedule and the baby's schedule should be carefully worked out by mother and nurse before the nurse leaves. The family meals and the busy periods of the day should be set down on paper, and the baby's meals, bath time, etc., spaced so the two will not interfere with each other. *This work schedule should be tacked up on the wall, and the mother should start in to be as regular with the baby's program as she is with the family meals. This is the first secret of having a good baby.*

### **The Sixth Week Postpartem Visit**

It is exceedingly important, when the baby is six weeks old, that the mother and baby should visit the physician for a check-up on the infant's feeding, weight, development and general condition, and to check the general condition of the mother, especially as to the state of the pelvic organs.

## **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**



**PART II**

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**CHILD CARE**

(39)

## Chapter VIII

### CARE OF THE BABY

#### Breast Feeding

With very, very few exceptions, every mother *can* nurse her baby. With almost no exceptions, every mother *should* nurse her baby.

The few instances in which the mother is so diseased that she cannot or should not nurse her baby are so rare they may almost be ruled out of consideration. Artificial feeding should certainly never be resorted to without explicit orders from a physician.

**Reasons Why Every Mother Should Nurse Her Child.** 1. The sucking at the breast stimulates the uterus to contract. This is very important to prevent hemorrhage, to make sure that the uterus returns rapidly to normal size, and that it drains effectively and thoroughly.

#### Reasons Why Every Baby Should Be Breast Fed.

1. Mother's milk is the one and only food prepared by nature for the exact and particular needs of the baby. No perfect substitute has yet been devised.

2. Mother's milk is always sweet and clean and cannot become contaminated by any of the dozens of ways in which artificial food may become unsafe.

3. It is always the right temperature.

4. It belongs to the baby. *It is his food, prepared at this time for his special personal use.* No mother who realizes what she is doing will take the one rich, right and suitable food out of her baby's mouth and substitute a poor and often a dangerous imitation.

5. The death rate of artificially fed babies is higher than that of breast-fed babies.

NOTE—If it is necessary to feed the baby artificially, the formula should be carefully supervised by the physician. No advice but his should be taken, except, in his absence, that of the public health nurse.

**Feeding During the First Three Days.** The baby's stomach and bowels are not ready for milk for several days after birth. The mother's breast contains a fluid (colostrum) which is just what the baby needs to clean his digestive tract and make it ready to digest milk. The physician may prescribe the use of five or ten percent glucose in water. It is a serious mistake for the mother or others to give a baby anything except a little boiled water before the milk starts to flow. *Nature has made no mistake in delaying this for two or three days. Nurses, aunts and grandmothers who give the baby sweetened water, catnip tea, milk and other mixtures, make serious and often fatal mistakes in so doing.*

Until the milk flow starts, the baby should be put to the breast about every four to six hours during the day. If the mother and baby rest well it need not nurse at all at night; surely not more than once.

**Causes for Delayed or Insufficient Milk Supply:**

1. Severe labor and delayed convalescence.
2. Worry, loss of sleep, nervous excitement.
3. Too hard work before confinement.
4. Getting up too soon and too hard work after confinement.
5. Insufficient or improper diet.

Rest, quiet, sleep and careful feeding will overcome the effect of all these causes in practically all cases.

**Causes for Failure to Nurse Child:**

1. Inability of the child to nurse due to birth injury or the frenum which is binding the tongue down.
2. Insufficient breast milk causes baby to become restless, throw back his head and cry.
3. Inverted and cracked nipples.

Failure to nurse on account of birth injury is not an uncommon occurrence. Sometimes the baby is handled too much trying to get him to nurse. Many babies are handled too much at feeding time, thus wearing out both baby and mother. It always must be borne in mind that nursing is a reflex action, and no effort on the part of the attendant will increase this action. If all conditions are right, very little trouble will be encountered. Too much attention in the past has been focused on minor things, and the more important ones have been overlooked. If the baby is suffering from a birth injury, it should not be put to the breast for the first few days or weeks of life.

**Indigestion.** To take a baby from the breast and put in on artificial food because it has colic or indigestion, or loses weight, is a very serious mistake. All efforts should be directed to building up the mother's health, getting more sleep and rest for her, getting mother and baby out of doors and regulating the mother's diet, with careful attention to regularity and manner of nursing. The mother must help herself by self-control and careful regulation of her life.

It should always be borne in mind that the infant's indigestion may be caused by many reasons other than the quality of the mother's milk.

A great deal of trouble in the first part of so-called indigestion in the newborn is nothing more than insufficient breast milk and hunger colic. If this is properly attended, either with complementary or supplementary feedings, consisting of powdered or canned milk in proper proportions with proper modifier, little trouble will be encountered.

**Water.** *Do not forget to give the baby water*, especially in hot weather. Always boil and cool the water. Give from sterile bottle at first, but change to cup and spoon as soon as possible. Give water midway between feedings at least twice daily. In hot weather give water between every two feedings. Babies cry because they are thirsty as often as because they are hungry.

**How to Nurse the Baby.** The baby's mother should always retire to a quiet room to nurse her baby, and should not be busy visiting or supervising her household affairs while nursing. The baby should be placed so that it can breathe easily and not be crowded. In many cases it is advisable for the mother to lie down while nursing her baby, although if there is trouble with the baby vomiting at nursing, it is perhaps better that she sit in a rocker so that the baby's body will be more upright. The baby can then belch gas

without emptying the stomach of the recently nursed milk. Whether the mother is lying or sitting, she should so arrange herself that she is perfectly comfortable and at complete rest, with a pillow against her back. Twenty minutes of absolute rest every three hours will do much for a tired mother. A pillow on the lap enables the mother to sit up straight while holding the baby at the breast.

### Artificial Feeding

**General.** Every baby should be under the supervision of a physician and at no time is this more necessary than when artificial feeding is begun. The physician will select the milk mixture, explain how to prepare it to suit the needs of the baby and instruct the parents in the use of the supplementary feedings such as orange juice, cod-liver oil, cereals, egg, fruits and vegetables.

Each baby who must be artificially fed represents an individual case. The food which agrees with one may not agree with another. The correct food for the baby must build bone, muscle and blood. There must be a definite gain in weight. Foods which apparently agree with the baby, but do not serve the purposes mentioned above, must not be used. Foods which are too rich in sugar will make a fat baby, but will not build a strong, healthy baby.

There is no real substitute for mother's milk, but if the mother cannot nurse her baby, the most practical substitute is cow's milk, modified according to the instructions of the physician to suit the needs of the child.

In artificial feeding there are three things that the mother must keep in mind;

1. Good milk must be selected.
2. The milk mixture must be adequate in kind and amount.
3. The mixture must be prepared so that it will be safe and easily digested.

**Patent or Proprietary Foods.** There are two kinds of proprietary foods: those that contain no milk, and those that contain milk. The latter have a high proportion of sugar. Babies like them for this reason. Babies fed entirely on patent foods are sometimes fat, but they often show symptoms of anemia and of rickets and have little power to resist disease. Scurvy frequently follows the exclusive use of patent foods. All such foods are expensive. No proprietary food should be given to a baby except under the direction of a physician.

**Condensed, Evaporated and Dried Milk.** *Sweetened condensed milk* is evaporated cow's milk to which is added a great deal of sugar. Condensed milk is never used except for the first few days after birth and is never used for a maintenance diet.

*Evaporated milk* is whole milk cooked until reduced to half of its original bulk and canned *without the addition of sugar*. The long cooking makes evaporated milk a very digestible food. It should be diluted with boiled water and sugar added according to the formula given by your physician. As this milk has already been well cooked it need not be boiled.

*Dried milk* is now the best substitute for fresh milk when this cannot possibly be obtained. The best brands contain all of the solid constituents of whole milk practically unchanged, and need only the addition of water virtually to reproduce whole milk.

**Kind of Milk.** In cities and towns *pasteurized* grade-A milk should be bought if available. In places where pasteurized milk cannot be obtained, only bottled milk from tuberculin-tested cows, produced and handled under good conditions by healthy workers, should be used. As a rule it is better to take milk from a herd rather than from a single cow, since that from a herd is more uniform in quality. Milk averaging  $3\frac{1}{4}$  to 4 percent fat is best for babies.

**Pasteurization.** Because of the great danger of transmitting diseases through milk, all milk should be properly pasteurized before it is delivered to the householder. Proper pasteurization—heating for thirty minutes at a temperature that kills disease germs ( $140^{\circ}$  to  $145^{\circ}$  F.) is necessary to make milk safe. It does not make poor milk a good food, nor does it justify the use of dirty milk—the quality and conditions of production should be as good for milk that is to be pasteurized as for milk that is to be sold raw—but it adds an important factor of safety to any milk. In some small cities and towns conditions of production are so insanitary that pasteurization is doubly necessary if the milk is to be given to babies. Milk should not be used for babies more than 36 hours after pasteurization.

Pasteurization does not take the place of boiling milk before giving it to a baby; all milk given to a baby *must be boiled*.

### Utensils and Their Care

A certain shelf in a fly-proof place should be set apart for the baby's milk things. Everything used about the baby's milk should be kept by itself and used for nothing else whatever.

All utensils should be filled with cold water as soon as emptied. Never let milk dry on anything. As soon as convenient, wash in hot water and soap, rinse and boil, drain out of the boiling water without wiping, and place away until used.

Rubber nipples should be rinsed in cold water, scrubbed and boiled, always taking care to turn them wrong side out and clean both sides. Drop into a jelly glass which has been boiled, and put on the cover to the glass, which should also be sterile. Nothing should ever touch the milk which has not been scoured and boiled and kept in a perfectly clean place. Wash and boil the small things in the saucepan. *Do not wash them in the dishpan or with other dishes or utensils. Use only fresh, clean cloths.*

The following utensils will be needed for modifying milk:

A 3- or 4-quart saucepan of aluminum or granite.

A kettle for pasteurizing, if milk is to be pasteurized.

A pie pan full of nail holes to keep bottles from the bottom of the kettle.

A tablespoon kept for this purpose only, or a long-handled aluminum spoon.

A glass or porcelain funnel.

A measuring glass, marked in ounces.

Seven nursing bottles.

A dozen nipples.

Seven rubber or glass corks to fit the nursing bottles.

A bottle brush.

A fork.

The bottles should hold eight ounces and have the scale blown on the side. The nipples should be the conical shape, which can easily be turned wrong side out.

Nipples get soft and useless if kept in soda water or other solution. It is better to sterilize them and keep them dry, and scald them just before using.

New bottles should be put in a basin of cold water which is brought slowly to a boil, and let stand until cold. Glassware so treated will not easily break when hot milk is poured into them.

Bottles should be freshly boiled before filling.

Nipple holes should be large enough to let the milk drop rapidly, but not pour. It is better to buy nipples in dozen lots and never run out of a supply of good ones. If the hole is too small, run a hot darning needle through the hole.

The bottle brush should always be used to cleanse the inside of the bottles. Always boil the corks and keep in a sterile covered dish until used.

### **Modifying Milk**

"Modifying" milk, or "humanizing" it, as the process is aptly called in New Zealand, consists in combining milk, water and sugar in the proportions which best suit the needs of the baby at different ages. The exact proportions of milk, sugar and water to use will be determined by your family physician.

### **Preparing the Daily Ration**

In the morning the mother should prepare the day's feedings all at once. This is an economy of time and saves handling the milk, which is always liable to contaminate it.

The mother should never fail to scrub her hands and put on a perfectly clean apron before she starts to prepare the milk.

She should then assemble everything she is going to use on a clean table. If she uses bottled milk she should wipe the outside and top of the bottle with a clean cloth, turn the bottle upside down several times to mix the cream evenly with the milk, take the boiled fork and stick one prong into the center of the paper cap, lift and stand the fork so the under side of the cap touches nothing.

She may then pour the necessary amount of milk into the glass measuring cup or graduate, replace the cap and place the bottle in the ice box for family use. If the milk is produced at home, use fresh, new milk and prepare at once after the morning milking. To this add the necessary amount of water and sugar, stir well, pour into the saucepan and bring quickly to a boil. It should boil for three minutes, stirring constantly. The milk is then poured into the freshly boiled bottles through the funnel, carefully estimating the amount to be poured into each bottle. The sterile glass or rubber stoppers are added, and the bottles may be stood in the saucepan filled with cold water until they are cool enough to put in the icebox. They should be cooled as quickly as possible and kept cold until the moment of using.

### **Keeping the Milk Cold**

It is absolutely necessary to have some way of keeping the baby's milk cold. The family should take ice and use a refrigerator or icebox if possible. If the price of this is prohibitive, a small piece of ice in a homemade icebox or

fireless cooker will keep the baby's bottles cold through twenty-four hours. Directions for making this type of a container may be found in Farmer's Bulletin No. 353, which may be obtained free by writing to the United States Department of Agriculture, Washington, D. C.

**Refrigeration.** After milking, the milk must be cooled quickly by standing the cans in cold water or ice water. Milk should be kept at a temperature below 50° F.

Where ice is out of the question the bottles may be placed in a tightly covered tin pail and hung in the well, or stood in the running water of the springhouse or milkhouse. Directions for making an iceless refrigerator may also be obtained from the Department of Agriculture. The baby's milk should not be trusted to this, however, unless cooling is absolutely certain.

**Cautions.** In traveling, the baby's milk may be carried cold in a thermos bottle. *It should never be carried warm*, neither should the mother try any devices for keeping the baby's milk warm at night in order to save herself the trouble of getting up to prepare it. The mother must never forget that disease germs grow rapidly in warm milk, and that despite every precaution a few germs of a kind that cause bowel trouble may possibly get into the milk and increase to millions within a few hours.

### Daily Program for the Well Baby Under 5 Months

<i>4 hour feeding.</i>	<i>3 hour feeding.</i>	
6:00 a. m. ....	6:00 a. m. ....	Breast feeding. Leave in crib to sleep.
8:30.....	8:30.....	Bath. Before bath let baby kick and play freely on bed a few minutes without clothes.
10:00.....	9:00.....	Breast feeding.
10:20.....	9:20.....	Out of doors until feeding time. Drink of water after nap.
2:00 p. m. ....	12:00 noon.....	Breast feeding.
2:20.....	12:20 p. m. ....	Out of doors as long as season permits. Long nap. Drink of water after nap.
	3:00.....	Breast feeding.
3:20.....	3:20.....	Out of doors as long as season permits.
5:15.....	5:15.....	Undress for night. Before putting on baby's night clothes let him kick and play a few minutes on bed. Play must not be exciting nor rough.
6:00.....	6:00.....	Breast feeding.
6:20.....	6:20.....	Bed, lights out, windows open.
10:00.....	10:00.....	Breast feeding.
2:00 a. m. ....	2:00 a. m. ....	Breast feeding (this feeding should not be given after the first two or three months.)

NOTE.—Naps out of doors should be taken where the baby is protected from direct rays of the sun and strong breezes. There should be reasonable exposure to sunshine every day, according to the physician's advice.

### How to Give the Bottle to the Baby

When the feeding time comes the mother should take one of the bottles and stand it in a pan filled with hot water. After it is warm replace the cork with a nipple. Never allow bottles with nipples to be exposed to dust or flies.

Test temperature of milk by letting a few drops fall on the wrist; *never by touching the nipple to the mouth*. When it feels warm to the wrist give it at once to the baby.

The mother should take the baby in her arms much as if he were going to nurse from the breast, and she should hold the bottle all the time. She should

not prop the bottle up and leave the room. The baby may strangle, lose the bottle or suck air from an empty bottle.

If the baby gets the milk too fast she should remove the bottle from his mouth occasionally. If he is inclined to play she should keep him at his job until done.

When through taking the bottle she may hold him against her shoulder and gently pat him until he raises any air he may have swallowed, then lay him quietly down. A baby should never be shaken about after nursing.

### Making Changes in Diet

Abrupt changes should never be made without a physician's advice. A physician should always be consulted before a formula is started. If the mother's milk becomes scanty and the baby must be given additional food, *he should keep nursing regularly as long as the mother has a drop of milk.* Let him nurse the breast at the regular feeding times and *nurse the breast dry*, then give him his bottle to make up the rest that he needs. Breast milk, even when there is only a little of it, is of great importance to the baby.

Sometimes the breast milk comes back if it is not allowed to dry up.

When first putting any baby on a bottle one should begin with a modification suitable for a child one to two months younger than the baby. Try this for several days; if it agrees, gradually bring the strength up to his age.

If giving a modification suitable for a younger child does not agree at first, try using skimmed milk instead of whole for a few days, as it is the milk fat which is most apt to disagree with the baby at first.

If the baby shows he is not satisfied with the amount given in these tables for his age as shown, by demanding his bottle before feeding time or holding to it when emptied, give him the strength for the next age. This is better than feeding oftener or giving more of the same mixture.

### Barley Water and Oatmeal Water

Add two tablespoonfuls of pearl barley or oatmeal to one quart of cold water. Boil slowly for two hours. Add boiling water as it evaporates, so that there will be one quart of water when done.

Strain while hot; cool and keep on ice.

### Limewater

Science is constantly making new discoveries about the very complicated process of digestion. One of the later discoveries is that limewater tends to combine with the fat in the milk in such a way that the fat will not be easily absorbed from the intestines. Formerly "top milk" or cream and limewater were both added to "modified milk," and probably gave the baby's bowels a hard job for nothing, since the limewater made the fat insoluble. Limewater was used to break up the hard curd of cow's milk. It is now thought that barley water or other cereal water will do this as well or better.

Top milk and limewater have accordingly both been dropped from the later feeding schedules.

Table for Feeding

Average weight of baby in pounds.	Age of baby.	Number of feedings.	Total ounces in 24 hours.	Ounces of whole milk.	Ounces of water (barley water from 2 months).	Amount of sugar.	Intervals between feedings.	Hours of feeding.
7½	1st day.....	4	4	.....	4	.....	6	6, 9, 12 noon; 3, 6, 10 p. m.
7	3d day.....	6	10	5	5	2 tsp.....	3	ditto
	4th day.....	6	13	6½	7	3 tsp.....	3	ditto
	5th day.....	6	14	7	7	6 tsp.....	3	ditto
7½	7th day.....	6	16	8	8	1½ tsp.....	3	ditto
7½	10th day.....	6	18	9	9	1 oz.....	3	ditto
	3d week.....	6	24	12	12	1 oz.....	3	ditto
	4th week.....	6	25	12½	12½	1 oz.....	3	ditto
8½	2d month.....	6	30	15	15	1¼ oz.....	3	ditto
	2½ months.....	6	32	16	16	1¼ oz.....	3	ditto
	3d month.....	6	34	17	17	1¼ oz.....	3	ditto
10½	3½ months.....	6	34	17	17	1¼ oz.....	3	ditto
12¼	4th month.....	6	35	23½	11½	1¼ oz.....	3	6, 10 a. m.; 2, 6, 10 p. m.
13¾	5th month.....	5	36	24	12	1¼ oz.....	4	ditto
15	6th month.....	5	38	28½	9½	1¼ oz.....	4	ditto
16	7th month.....	5	39	29½	9½	1¼ oz.....	4	ditto
16½	8th month.....	5	41	28	0	.....	4	ditto
17½	9th month.....	5	42	30	0	.....	4	ditto
18	10th month.....	5	40	30	0	.....	4	ditto
19½	11th month.....	5	36	31	0	.....	4	ditto
21	12th month.....	4	32	32	0	.....	4	7, 11 a. m.; 3, 7 p. m.

\* The average weight of a baby at birth is 7½ pounds, but it loses about ½ pound in the first three days.

Orange juice daily, between feedings from end of first month.

Note.—Since every baby represents an individual feeding problem, the formula should be provided by the family physician. The above table is given only to show a general idea of the contents of the formula at various ages.

### Supplementary Foods

The foods that the baby needs during his first year, in addition to breast milk or a milk formula, are:

1. Orange juice, which is given because it supplies the vitamin which prevents scurvy. It also supplies minerals which insure better growth.
2. Cod-liver oil is given chiefly, because it contains vitamin D, which prevents rickets, a disease which interferes with normal development of a child's teeth and bones.
3. Cereals and bread supply needed additional nourishment. Bread may be given in the form of crusts, educator crackers or zweibach.
4. Egg yolk is given chiefly because of its blood-building property.
5. Dark leafy vegetables and carrots supply iron, minerals and vitamins.

### The Bath

The baby should be bathed at a regular time daily. Just before the second feeding is usually the best time. Begin giving him a daily tub bath as soon as the navel is healed.

A foot tub or infant's bathtub is very convenient. A wash bowl will answer in the absence of the tub. A low table is more convenient than the lap, although some mothers prefer to handle the baby on the lap. If the table is used, pad one end of it with a heavy bath towel or folded quilt or other soft pad. Place over this the soft towel with which the baby is to be wiped. Place the tub on the other end of the table. If the mother finds it more convenient to handle the baby on her lap she should wear a bath apron or spread a large bath towel over her lap.

On a chair or stool near by place the toilet tray or basket, containing soap, boric acid for the eyes, plain olive oil for the nose, the glass of sterile cotton swabs on toothpicks, talcum powder, etc.

On the drying rack, also near by, hang the baby's wash rag and clean clothes.

Undress the baby, wash head and face, using soap very sparingly; wipe carefully, paying especial attention to all wrinkles and crevices.

Now lather the baby's body. Take the baby on the left arm, letting the buttocks rest in the palm and the back and head rest on the forearm, and lower gently into the water. With the right hand and wash rag wash off the lather; place the baby on the soft wiping towel, wrap this around him, pat him dry, then take plenty of time to go over his body, gently drying every fold and wrinkle. This will do more than any other one thing to prevent chafing.

Try also to take time to massage gently the baby's body by rolling the flesh with the palm of the hand. If properly done the baby will thoroughly enjoy it, and this hardens the skin, stimulates the circulation and tends to make the baby much more resistant to "taking cold."

Powders that are nonallergic and that are not perfumed should be used.

Any good standard brand of baby powder is usually satisfactory, but if not available, plain cornstarch powder is all right. Powder should be smoothly applied so as not to create a cloud of dust, which would be injurious to the baby's lungs.

### Care of the Scalp

If the baby should get scale or dandruff on the scalp, rub gently but thoroughly with pure olive oil at night, and wash off with soft water and good soap when giving the bath the next day. Repeat as often as necessary. Use only a soft brush and infant's comb in arranging an infant's hair. Never try to comb off scale or dandruff.

### Putting on the Clothing

A table of proper height, large enough to hold the bathtub as well as to give space for drying and dressing the baby is almost essential. (Sitting down in a straight-back chair before such a table to bathe and dress the baby or change his diaper is a great saving in strength for the new mother.)

To dress the baby, adjust the diaper, shirt and stockings. Pin these together so that they will be smooth but not tight, and also so they will stay in place, not wrinkle and draw.

Place the skirt inside of the dress, run the left hand through from the bottom to the neck; lift the baby in the crook of the right arm and slip his body into the dress, grasping his feet with the left hand. Never put garments on over a baby's head, and never force sleeves on by bending the arms backward.

### Care of Eyes, Nose and Ears

Cleanse the baby's eyes with pledgets of cotton or sterile gauze wet in boric acid or boiled water. Use a separate piece for each eye and throw pledget away. Wipe from the inner corner toward the outer corner, without forcing the eye to open.

Do nothing to the baby's nose unless there is some discharge or inflammation. Then cleanse very gently with cotton swabs or toothpicks dipped in olive oil. Never use any force, and never put any preparation in an infant's nose, other than plain sterile olive oil.

Cleanse the external ear very carefully with a cotton swab dipped in clean water; dry with a bit of cotton. Never attempt to cleanse the inside of the ear canal.

Consult a physician immediately if the baby shows any sign of trouble with eyes or ears. It is better to do this many times for simple troubles than to neglect a serious condition once.

Also consult a physician, a specialist if possible, if the baby does not breathe freely and easily through the nose. This may mean enlarged adenoids, even in very early infancy.

### Sun Baths

Sunlight is a most important factor in the life of a growing child, especially a baby. Although this has been known in a general way for a long time, it has not been given sufficient attention until recent years, during which knowledge of the effect of sunlight on the growth of children has become more specific.

Normal growth of bone is dependent not only on the food that the child eats but also upon the direct sunlight that he receives, for the sunlight provides the body with the power to utilize the food. If a baby is constantly deprived of direct sunlight his bones will not develop normally, his muscles will be flabby, and his skin will be pale. He will probably have rickets.

**Beginning the Sun Bath.** On the first sunny day in early spring the baby may be put in the direct sunlight with the hood of the carriage and the baby's cap pushed well back so that the sun will shine directly on his cheeks. He should be turned first on one side and then on the other, so that both cheeks will be exposed to the sun and yet the eyes will be kept away from the direct rays. On the first day the baby's hands should be exposed to the direct sun for a few minutes. Care must be taken not to burn the skin. Judgment should also be used to avoid chilling of the body surfaces, so that the baby will not catch cold.

A slight reddening of the skin each day will gradually bring about pigmentation or tanning. Unless the baby is accustomed to the sunlight through exposure at an open window, the first outdoor sun bath should be for 5 or 10 minutes only. Each day thereafter the exposure to the sun should be increased by 3 to 5 minutes.

Every few days the amount of body surface exposed should be increased, at first slowly, but as the days grow warmer, more rapidly.

**Rickets Caused by Lack of Vitamin D.** Rickets is a disease of growth, affecting the whole body, but most strikingly the bones. In hot climates, where children are outdoors in the sun throughout the year, rickets is little known; in temperate climates, where children are indoors a large part of the year, rickets is prevalent. Rickets is a disease resulting primarily from lack of sunlight. It can be prevented or cured by giving Vitamin D.

To ward off rickets preventive measures must be begun very early in an infant's life, for the disease makes its appearance in very young infants. These preventive measures are the giving of sun baths and the administering of cod-liver oil or other fish-liver oils, the so-called "bottled sunshine."

### **The Infant's Bed**

The baby should sleep alone at all times. It is both dangerous and insanitary for a baby to sleep with an adult. Many babies have died of suffocation—smothered to death by the mothers with whom they were sleeping.

The first requisite of a good bed is that it should enable the baby to lie perfectly flat. It may be a large clothes basket, a wooden box or a bassinet, with a folded piece of table padding or several thicknesses of blanket as a mattress. It must be flat and smooth. Never should the improvised bed be placed on the floor while the baby is in it. It should stand on a table or two chairs, in a part of the room which is ventilated but not drafty. As soon as the baby tries to sit up he needs a larger, sturdier bed, preferably a crib with high sides and a comfortable mattress. The mattress should be covered with rubber sheeting or a piece of oilcloth. Over this place an easily washable cotton pad, then cover with a small sheet tucked smoothly under the mattress. Bed coverings should be light and warm, and should be tucked under and pinned to the bottom side of the mattress at the foot of the bed. This will prevent the baby's being smothered to death by pulling and kicking the covers over his face—a type of accidental death which occurs with sickening frequency. If there is danger of drafts, a sheet over the sides of the bed tucked securely under the mattress will protect the baby. A regulation screen will serve the purpose also.

### Fresh Air

Many parents have the erroneous idea that a baby should sleep in a cold room. This may lead to disastrous results. The real requisite is for clean, fresh air without drafts. In babies, as in adults, fresh air is conducive to sleep.

**To Protect the Baby on Cold Nights.** Sew half of an old woolen blanket to make a square bag, cut a round hole in the center of one end for the neck; cut down the middle of the front and bind the edge; tie with tape. Make very large, so the baby can move his arms and legs and turn as he likes.

After making his night toilet tie him in this sleeping bag. If the room becomes very cold, put on a hood *when it begins to get cold, not before*. In extremely cold weather spread a folded blanket over the basket, place the baby, sleeping bag and all, in the middle, fold the blanket over him loosely and pin to the underneath side of the foot of the bed with safety pins. *Never "tuck in" a child of any age so tightly that he cannot turn or move freely. Children will not kick the covers off if they are free and comfortable.* Fastening the covers to the mattress at the foot of the bed may prevent accidental suffocation.

### The Nursery

The baby should have his own room from the start, if possible. Homes should be built and furnished for children quite as much as for adults, and every family, when building, should include a nursery, or children's room.

If the house is small and a special room is out of the question, the baby should live in the airiest, sunniest room in the house. Babies wilt, like flowers, in hot, stuffy, overcrowded rooms.

Always put the baby in another room when sweeping, washing or doing anything which will make the air dusty, hot or steaming.

### Changing Diapers at Night

During the first few weeks of life, or during illness, there should be a warm place to take the baby to change it, although it need not sleep in a warm room. After the feeding is regulated an infant's bowels should not move at night. During cold weather it is better to place extra diapers *under* the baby to absorb the urine, and not expose it to remove wet diapers during the night.

A child who awakens when wet and demands a change from the start is less likely to become a bed wetter. He may be more trouble at first, but he will be less trouble later.

### Sleeping Habits

The new baby sleeps almost all of the time. He should be awakened regularly for nursing. In a short time this will become a habit. If this is not done he will not get enough food during the daytime and will have to nurse at night. It is very important that the mother should get unbroken sleep, so great pains should be taken by the nurse, before she leaves, to have the baby trained to feed regularly during the day and not to nurse at night.

As soon as possible, according to the weather conditions, the baby should be put out of doors in the sunshine for his daytime naps. He should be dressed exactly as if he were to be taken downtown or elsewhere. Instead of this, the buggy is allowed to stand outside while he sleeps. Always shield from wind and dust.

### **The Baby is not a Plaything**

The interest of family and friends naturally centers in the wonderful new baby. Everyone wants to hold him. After he begins to take notice, everyone loves to make him laugh, and nine out of ten persons will thoughtlessly tickle or shake or otherwise excite a baby for the pleasure of hearing its violent laughter. This is wrong and must not be permitted.

Babies need to have their position changed often, and they may occasionally be carried from place to place for a change of scene and position. As they grow older, they should be quietly amused and provided with an abundance of occupation. Violent play or tossing or shaking should not be permitted.

### **Thumb Sucking**

This is a habit which may be due to a nervous manifestation, either as a family disturbance or from some local irritation. It can also be brought about by allowing the baby to suck on a bottle between feedings or allowing the baby to have other objects in his mouth. It is easier to prevent this habit than to cure it.

Mittens may be tied to the wrists with tape, or with the very small infant, sewing the cuffs of the nightgown together will effectively prevent thumbsucking. Do this the very first time the child is caught sucking his thumb or fists.

After the habit has become fixed, the mother must be very persistent and never give up after she has undertaken to break it. Wrap the active hand in a bandage so that the child cannot get hold of the thumb or any one finger. If this is still insufficient, slip a pasteboard roll over the elbow and pin to the dress so that he cannot bend his elbow.

### **The Baby's Bowels**

The first movements are dark colored and of a smooth consistency. This is called meconium. This is material which accumulates in the bowel before the baby is born. The colostrum in the mother's breasts during the first few days cleans this out of the bowel. Until this is done it is wrong and foolish to put anything in the baby's stomach which must be digested.

The bowel movements soon turn yellow after milk feeding starts, and should have a smooth mushy consistency. The normal baby usually has from two to four movements in twenty-four hours. The most essential good habit to teach a baby is regularity. This begins at birth and applies not only to his eating and sleeping, but also to his bowel movements.

From one month on, a mother may begin training her baby in this respect. A porcelain cuspidor (spittoon) of the usual shape is an ideal vessel for this purpose. There are also small chambers suitable for this purpose. The mother warms this, holds it on her lap and seats the baby on it in such a way that the baby is comfortably supported in the crook of her arm. By doing this regularly ten or fifteen minutes after the early morning feeding and again after the evening feeding, twelve hours later, it will usually become possible almost wholly to eliminate soiled diapers. By careful watching and making a schedule of the normal urinations it will early become possible to reduce the number of wet diapers. A child who is thus trained to be dry and clean and regular will be far less liable to become a habitual bed wetter, and will be a more comfortable, sanitary and satisfactory child.

**Signs of Bowel Trouble.** Watery stools, or too frequent stools (more than four a day) indicate indigestion or infection. The treatment is immediately to stop giving milk if the condition is acute, or reduce the amount if the symptoms are not severe. Give all the cool, boiled water the child will take. If the discharges are irritating give an injection of one pint of warm, boiled water in which one level teaspoonful of salt has been dissolved. Give this very slowly and gently. After each movement of the bowels wash the buttocks with soap and water, pat dry with a soft cloth, then grease thoroughly with olive oil, lanoline or clean mutton tallow. Call the physician at once.

**Constipation.** Constipation exists when the stools are less frequent or firmer than normal. During the early months, nursing infants have from two to four movements daily. Many, however, have only one, and if this is normal in character, the child is not constipated.

The causes of constipation are many. The food of young infants, who are artificially fed is itself constipating, while in breast-fed infants the trouble is often an insufficient quantity of milk.

Constipation should be prevented by the early establishment of regular bowel habits.

**Immediate Relief of Constipation.** As a rule, constipation should be treated by the adjustment of the formula. Your physician should be consulted in this matter.

Immediate relief may be obtained by the use of a soda water enema (one teaspoonful of baking soda to a pint of warm water), a salt enema (one level teaspoonful of table salt to a pint of warm water), a soapsuds enema, an olive-oil enema or the use of a glycerin suppository.

The baby should never be given any medicine without the order of the physician.

The practice of giving mineral oil to the baby should not be developed, since the oil prevents the absorption of one of the vitamins needed for the growth of the body.

**Colic.** When a baby has colic he cries persistently, pulls his legs up over his abdomen and shows evidence of pain. Colic may be due to insufficient feeding, overdistention of the stomach and bowel by gas or swallowed air or, rarely, to overfeeding.

The early establishment of regular bowel habits will do much to prevent colic.

The condition may be corrected by placing the baby over the shoulder and patting him on the back to aid in the expulsion of the gas from the stomach. An enema of the type previously described may be needed to give relief. If these means do not give relief, your physician should be consulted. Give no medicine for this condition without the advice of your physician.

### **Diaper**

It will minimize the unpleasantness of caring for the baby's diapers if a square of soft old linen or a very soft paper napkin (sold in most stores at reasonable prices), is placed inside the diaper to receive the bowel movement. This can then be burned, and the diaper itself is much more easily washed. This is especially desirable during the first week, as the first bowel movements are dark and stain the diaper.

**Washing Diapers.** A slop jar or bucket with a tight cover should be used to receive the soiled diapers, and they should be covered with water, after all loose bowel movement has been removed with newspaper, and burned. They will wash more easily if not allowed to dry. They should be sudsed, boiled, thoroughly dried and ironed in the regular manner. *Wet diapers should always be scalded and dried before using again.*

Diapers should be dried in the sun, if possible, and should be ironed unless material is very soft.

Never use lye or anything on the diaper except mild soap and hot water. They should always be carefully rinsed several times to be sure all soap is removed. If soap is left in the diaper the skin of the buttocks may become chafed.

### Crying

A healthy, happy, comfortable baby does not cry to excess. It is essential that a new-born baby cry several times every day to expand his lungs. Some crying in all infants is normal. Unusual or excessive crying should be investigated at once.

**Babies Cry for the Following Reasons:** 1. *Because they are tired.* Mothers should remember that a baby needs to have his position changed often and his clothing straightened in order that tender muscles and skin may not actually suffer. If this were done, there would be much less crying and so-called "temper" in babies. Frequently they get tired because they are tucked in too tightly or cannot move.

2. *Because bands become tight and clothing rubs or chafes or pins prick.* Every effort should be made to prevent the baby's clothing from annoying or fretting him, and it should be loose enough to permit him to move freely.

3. *Because his sleep has been disturbed.* A baby's regular sleep should never be disturbed; he will be fretful, tired and justly cross.

4. *Because of distress in stomach and bowels.* This is caused by too frequent or improper feeding.

5. *Because he is hungry.* A perfectly good reason, but the mother should be quite sure this is the real reason.

6. *Because he is sick.* The baby who is uncomfortable begins by fretting and increases his plaint until he yells lustily and indignantly. The baby who is tired and needs sleep has a weary look and a whimpering, irritable cry. The baby who is hungry sucks his fist, reaches about with his mouth and begins with a talkative, argumentative note, which increases to a furious remonstrance when food is delayed. The baby with colic or acute indigestion doubles up, shrieks violently, shows paroxysms of pain and real tears. The sick baby appears heavy-eyed and listless and whimpers rather than cries. A low, plaintive wail marks the very sick child. A child in acute pain, such as earache, cries out suddenly, is apt to turn the head back and forth, and an older infant will grasp at the painful region.

7. *Because he wants to be picked up.* Babies quickly learn to get pleasure from being held, rocked, pushed or carried. If they are picked up frequently at irregular times to be "shown off" they will soon develop irregular sleeping habits and when they waken will cry until they are picked up just to satisfy their desire for attention. This desire for attention is natural, but it should

not be indulged by the parents at wrong times, such as when it is time to go to sleep. It should be satisfied by planning a regular play time for 10 to 15 minutes in the morning or afternoon, or both. A baby who cries to be picked up will stop just as soon as he gets the desired attention and will start again as soon as he is put down. It is very bad to allow a baby to develop this habit. After the mother is sure that he is comfortable, not in pain, or is not hungry, she should leave the baby alone and let him cry it out. The baby will soon learn not to cry just to be picked up.

### **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**

## Chapter IX

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### WEANING

#### When to Wean

Under normal conditions weaning should be a gradual process, beginning at about six months and ending by nine months.

If properly conducted the milk flow will gradually lessen, the baby will gradually become accustomed to other food, and the only one to experience any grief will be the mother, who will regret that the pleasure of nursing her baby is to be no longer hers.

If the baby should be eight months old in July or August, he should be given fruit juice, cereal, pureed vegetables and a little modified cow's milk in addition to his mother's milk, but it will be safer not to begin to withdraw the mother's milk until September, or even October, if the weather remains very hot.

If the mother becomes pregnant, weaning must be begun at once and pushed rather rapidly. No woman can properly nourish two children at once. If the mother becomes ill, the physician must decide if weaning is advisable. Fortunately, it is seldom necessary in ordinary illnesses.

The return of menstruation usually does not injure the milk supply. A nursing mother who menstruates should, however, be especially careful not to overwork or get too tired, especially at her periods.

#### How to Wean

When it is determined to begin to wean the baby, begin by giving cow's milk, modified by the formula, at about the sixth month in the place of the second, and later the third, daily nursing, until the baby is ten months old, when modified cow's milk is substituted for all breast feeding.

Give this from a small cup. Try very hard to teach the child to drink the milk rather than take it from a bottle. This is very much better than to have to sterilize nipples and bottles; it is better for the teeth, and it also does away with the very troublesome process of "breaking from the bottle" later. This is often much more difficult than weaning from the breast.

Beginning at the sixth month a well-cooked cereal is given before one or two breast feedings daily. In a few weeks strained fresh vegetables are included in the menu (carrots or a green leafy vegetable, such as spinach). At about the eighth month a daily breast feeding is omitted each week, and modified whole cow's milk and a cereal or a vegetable are substituted. By the tenth month the baby is entirely off the breast and on mixed cereal-vegetable and modified whole cow's milk diet.

Digestive upsets for the baby and discomfort for the mother may be prevented by this gradual weaning.

## Chapter X

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### FEEDING AFTER WEANING

#### The Daily Schedule from 12 to 18 Months

Every mother should make a daily schedule for the baby, adapted to his age, and follow it strictly.

The following schedule is suggested for the child one year of age, with change of starting time to comply with the rising habits of the family.

When the baby first awakens give him a drink of water; place him on the toilet chair to urinate, then give him two or three tablespoonfuls of fruit juice. Allow him to kick and play until breakfast.

- 7:00 a. m. Breakfast.
- 7:30 a. m. Bowel movement.
- 8:00 a. m. Bathe and dress.
- 8:30-10:00 a. m. Place child in play pen out of doors in the sunshine, in seasonable weather.
- 10:00 a. m. Child should have a drink of water, should urinate, and after a short supervised walk, be placed again in the play pen.
- 11:00 a. m. Nap.
- 12:00 a. m. Dinner.
- 12:00 noon to 3 or 3:30 p. m. Nap in well ventilated, quiet room, with baby's eyes protected from glare.
- 3:00 p. m. Give child a drink of water and place him on toilet chair to urinate.
- 3:30 p. m. Midafternoon lunch, consisting of a slice of bread and butter and a glass of whole milk or buttermilk.
- 3:20 to 5:00 p. m. Place child in outdoor playpen, sand pile or take riding in baby buggy.
- 5:00 p. m. Child should have a drink of water and urinate.
- 5:00-5:30 p. m. Playpen.
- 5:30-6:00 p. m. Supper.
- 6:15 p. m. Bowel movement.
- 6:30 p. m. Put child to bed. (In hot weather a tepid sponge bath with gentle drying will be restful and conducive to sleep.)

NOTE.—Your physician will provide a list of the foods the baby should have during this period. He will also advise in regard to giving vitamin D in the form of cod-liver oil or otherwise.

#### Preparation and Care of Food

**Milk.** Measure enough fresh milk in the morning to last all day, put it on the stove and bring it quickly to a boil (do not let it bubble for longer than one minute); cool it quickly and keep it on ice or in a cellar, iceless ice box or suspended in the well. *It must be kept cool from the moment of milking.*

Pour out just what is needed at each meal and stand the glass in hot water to take off the chill before giving it to the baby.

*Never pour used milk back with the stock supply. Throw away any that is left in the baby's cup.*

Keep a special cup with a handle for the baby to drink milk from; never use it for anything else; scald it every time it is used and put it where flies cannot touch it.

Carelessness with milk is one of the chief causes of summer diarrhea; the mother must not make even one slip in this important matter.

Ordinarily the baby should be given plain whole milk. The cream should be thoroughly stirred into the milk before taking out each feeding. Part of the cream should be removed from Jersey milk, however, as it contains too much fat.

**Bread.** Fresh, soft bread should never be given to any child. Bread should always be dry enough and well enough baked that it will crumb and not mash when rubbed between the fingers.

Whole-wheat bread contains more vitamins and minerals such as are needed to make good bone and blood than does white-flour bread.

*To make zweibach or twice-baked bread.* Slice bread and bake the slices in a slow oven until a delicate brown.

**Cereals.** Whole-grain cereals should be used very freely in feeding growing children. The refined and prepared cereals have had much of the most valuable parts removed.

Children should be given a variety of cereals. Oatmeal may be the stand-by, but some other cereal should be used at least twice a week in order that the child may not become tired of the sameness of his diet.

It is important to cook the hulls of grains, even though they are afterward strained out, as most of the vitamins and minerals are in or next to the hull. These are dissolved in the water in which they are cooked.

*To cook cereals.* Cereals require long cooking to bring out the flavor and to break down the starch granules. The starch grains will not break down unless they are heated to a boiling temperature. Cereals are boiled for a few minutes to break down the starch grains and then they are placed in a double boiler to steam until completely cooked. The time required for this depends upon the kind of cereal and the amount of precooking by the manufacturer. Oatmeal, cracked wheat, hominy, barley, corn meal, graham meals and the ground cereals should be cooked for three or more hours. Flaked and finely ground cereals take less cooking than the coarse cereals. Rice, both white and natural, can be cooked in a shorter time—often less than an hour. Milk, which may be used as part of the liquid in cooking cereals, enriches the diet.

*Cereal gruel.* Sprinkle one tablespoonful of either oatmeal, corn meal, barley, cream of wheat, farina, rice flakes or other uncooked cereal in enough boiling water to make about as thick as ordinary flour gravy when done. (The amount of water varies with different grains.) Boil hard for three minutes, then put in double boiler and cook for one hour; add one-fourth teaspoonful of salt. Strain through a fine sieve.

*Cereal mush.* A good mush is about as thick as mashed potatoes when cooked. The cereals used in making a mush or porridge may be cooked in a double boiler, a pressure cooker or a fireless cooker. Granular, flaked, cracked or whole grain cereals are used in making cereal mush. The length of

time for cooking depends on the kind used. Pre-cooked package cereals—grits, rice, farina, cream of wheat and similar finely ground cereals require less time. The coarsely ground and some of the finer ground cereals, such as corn meal, require from three to four hours of cooking. Whatever the type of cereal used, it should be cooked thoroughly.

*Serving the cereal.* Cereal that is not too thin encourages chewing. The child may be given the cereal without milk, or a small amount of milk or thin cream may be used with it. Very little sugar, or better none at all, is recommended. The child may eat too much cereal, if it is sweetened, and refuse to take the other foods that he needs each day.

**Vegetables.** Recent discoveries and experiments in food and diet make it known that vegetables are valuable and indispensable in children's diet. It is very important that children should become accustomed to the taste of vegetables and early acquire a liking for them.

*Vegetable soup.* Use one cup (washed and chopped fine) of any of the following vegetables: spinach, carrots, celery, tomatoes, string beans, green peas, dandelion greens, young turnips, young turnip tops. Add least amount of water necessary to keep from burning, cook slowly till tender and until water has nearly boiled away. Mash through sieve, keeping all the liquid, since this contains the minerals. Add a little salt.

This kind of vegetable extract is often prescribed for delicate and anemic infants and may be added to the diet of any child. It is especially rich in iron, potash and other minerals, and is also rich in the vitamins necessary to growth.

Vegetables may be cooked in a tightly covered single boiler or double boiler. Spinach and greens need no added water. Other vegetables need enough to keep them moist.

Lettuce and raw cabbage chopped fine are rich in vitamins and may well be eaten by growing children.

**Fruits.** Fruits also are rich in vitamins and minerals and are very important in the diet of children.

*Selection.* All fruit given to young children should be perfectly ripe and fresh. Select only ripe, sweet oranges for the juice for infants. Only perfect fruit should be given to any young child.

Canned pineapple juice and tomato juice may be used if good brands are selected in which only choice, ripe fruit was originally used.

Prunes and other dried fruit should be carefully selected; only fruits which were choice and ripe when dried should be cooked for small children.

*To cook prunes or other dried fruits.* Wash thoroughly, cover with water, soak overnight in aluminum or porcelain-lined pan; place on stove in same water; simmer very slowly until the water is syrupy and the fruit is very soft.

For a baby less than six months old, strain off the juice only. For more than nine months, rub the pulp also through the sieve.

Never sweeten any dried fruit. Ripe dried fruit, cooked as described, will develop its own syrup.

### Eating Habits

**Regularity.** Every child, no matter what his age, should eat regularly. In order to be ready to eat at the regular time the baby must sleep at a

regular time. Do not let anything interfere with the baby's schedule. No matter how busy a mother may be, it takes more time to care for a cross "fussy" baby than to be punctual and systematic and always have a healthy, happy child.

**Eggs or Meat.** Eggs, soft-boiled, coddled, or poached, may be given throughout the second year. Scraped meat may be added to the diet at fourteen months. It should be given at the noon meal.

Many little children learn to demand too much attention by being fussy about their food. Do not continually "coax" a child to eat. Place his meal before him, encourage him to begin. If he fusses about his food and does not eat, take it away, but do not get excited because he refuses. Do not keep offering him different foods at the same meal because he doesn't like or refuses what you give him first. Teach him to eat what you know is good for him. Do not let him become a "finicky eater."

**Eating Alone.** As soon as the baby is able to sit up alone steadily, have him sit on his own little chair before a little table with his back supported. He will learn to eat properly and will see only his own food, so will not even be curious about what the rest of the family eats.

The mother can eat her own meal in peace and quiet while the baby plays happily in his play pen or sleeps.

The rest of the family will not be tempted to spoil his liking for simple, wholesome food by giving him tastes of things he should not have.

This plan eliminates the dangerous "high chair," which should never be used until the child is old enough to sit at the table with the family, at about two years.

**Chewing.** The baby should be urged to chew and should be given plenty of time to sip his milk and chew every bite, but he should be kept continuously busy until he has finished his meal. *It is all important that the habit of deliberate, careful chewing be taught from the start. When the baby's teeth come through the gums he wants to chew. This is the psychological moment. Let him never forget for one day how to chew. If this instinct once fades it is very hard ever to train a child to chew his food properly.*

It is a mistake for a busy mother to feed a child entirely on soft food from a spoon, because it can be done more quickly and easily than to bother with letting him feed himself.

The baby of eight or nine months can learn to hold his spoon and cup while his mother guides his hand. As soon as he has learned this, he should feed himself, with help for a part of each meal. As soon as possible he should feed himself entirely.

**Piecing.** In no one thing will the mother have harder work than she will in preventing well-meaning but mistaken relatives from giving the baby cookies, candy, pop, ice cream, etc., between meals or when visiting.

No growing child should ever eat sweets of any kind between meals. *Especially should no child during his "second summer" ever have a taste of anything not included in the regular feeding schedule.* It is much better to prevent this habit than to correct it.

The mother had far better risk giving offense to adults than to risk having a sick child.

### General Cautions and Suggestions

Do not forget to give the child plenty of water to drink, and always from his own cup. Keep this cup clean and away from flies, and give him only water which has been boiled and cooled. Children often fret for food when they are really thirsty rather than hungry.

**Eating with Clean Hands.** From the very first wash the baby's hands before he handles his bread and food. This is important, because babies handle everything and may contaminate their food. It is also important from the standpoint of training in future health habits. Well begun is always more than half done in the matter of child training.

**Clean Food.** Protect all food from dust and flies. Never pick up food or anything else which the baby has dropped on the floor and let him put it in his mouth again.

While he is struggling with his first crusts, place him in the middle of a clean surface on a bed or on a clean sheet spread on the floor or in his play pen; then some one should watch him that he does not get his food dirty, that he does not choke, and that no flies get on his food.

Flies always bring filth on their feet, and *should never* be permitted to touch the baby's food or any container of milk or food. Flies on food and milk are one of the chief causes of summer diarrhea, from which so many babies die. Teething has nothing to do with it.

**Feeding from Eighteen Months to Two Years.** The variety of food may be considerably increased by the addition of the following to the choice for the noon meal: Small sandwich made from thin toast and crisp dry bacon, or finely mixed white meat of chicken, or delicate fish or scraped raw beef, or lamb chops delicately broiled, or egg; rice or plain boiled macaroni; simple desserts, such as cereal puddings, plain custards, stewed dried fruits, and carefully selected pulp of bland fresh fruits; also fresh ripe tomatoes with skins and seeds removed.

Continue the four-meal schedule and use separate chair and table for the child.

### PROTECT YOUR BABY

1. By vaccination against whooping cough before 6 months.
2. By immunization against diphtheria 9 to 12 months.
3. By vaccination against smallpox before 12 months.

## Chapter XI

### FEEDING FROM TWO TO SIX YEARS

**General.** A healthy child who receives an abundance of the right kinds of foods grows normally, is well content and well developed. His legs are straight and strong, his weight is satisfactory for his build, height and age. He has sound teeth, his hair is smooth and glossy, his skin is clear and his color is good. He has an alert expression. His eyes are bright. He is active and has a good appetite for his meals. The diet of the child of this age differs from the child of school age mainly in the way the food is prepared and in the amounts served.

**Planning the Child's Meals.** Variety—This is the time to introduce a variety of foods. The child should learn to like a great number of foods during the early years. This variety is obtained by using different foods, by preparing the same foods in different ways, or by different combinations. The child should find pleasure in his meals. When a child is fed a variety of well-cooked foods suitable to his age, it will be a long time before he will be concerned about what the rest of the family is eating unless the matter is suggested to him or discussed before him. It is between the ages of two and six that greater variety of vegetables, fruits and cereals should be used.

**Texture of Foods.** The food given the child from meal to meal should be changed in appearance and taste. Each soft food should be eaten with something crisp or crusty for contrast. For example, cream soup should be eaten with crackers or toast. Riced potatoes and spinach are more pleasing than potatoes and white squash. The form in which the food is cut in preparation appeals to the child. For example, carrots may be cut lengthwise, sliced or diced.

**Preparation.** Food for children should be prepared in such a way as to hold the natural flavor. Plainly cooked food is needed. The child has a baked custard whereas the family may have a custard pie. He has a plainly baked potato and the older ones may desire potatoes which are seasoned more highly. Children should not eat highly seasoned foods nor foods which are rich in sugar or fat.

**Size of the Servings.** The amount of food placed on the child's plate depends upon his age and appetite. The child from two to six should be given small servings. New foods should be given in very small servings. Familiar food should be given in larger portions.

#### Guides in Feeding Young Children

**Regular Schedule for Meals.** A regular schedule of three warm meals a day with the amount of food eaten divided fairly evenly between the three meals seems best for most children. If one meal is slightly larger than the others, it should usually be the noon meal. A light evening meal usually helps the child to sleep more soundly. However, an evening meal which is too light

may cause the child to fall short of the amount of food he needs each day and may cause him to awaken early because of hunger.

**Frequency of Eating.** At some time after the age of two years and at different times with different children, the child will be ready to go on a schedule of three meals per day. A nourishing breakfast should be supplied the child on this schedule. In many families the length of time between the noon and evening meal is such that the child needs an extra meal during these hours. The important thing is to have a regular schedule. The body adapts itself to certain habits and if these habits are good ones, the child will grow and be healthy.

"Piecing" between meals is a bad practice because it is likely to dull the appetite for the regular meals. A rapidly growing child, however, may need more food than he gets in the three meals. In this case, the child should have interval feedings at regular times and not too close to the three main meals. Foods which are best for these additional meals are: orange juice, or other fruit juices, fresh fruits, bread and butter, a small sandwich, a plain cookie or a glass of milk. Discontinue these additional meals if the appetite for the regular meals is diminished.

**Proper Seating at the Table.** When the child is ready to go on a schedule of three warm meals each day, he is usually ready to eat at the family table. He may have a "youth's" chair or a small box placed on an ordinary chair. He should always have some place to rest his feet. Children are often restless and hard to control at the table simply because they are weary and uncomfortable. A little foot-rest may be easily added to any chair.

The child should have his own food and greater watchfulness will be necessary to keep him from getting forbidden articles. If trouble occurs, let the child know that he does not eat the same food as do the grown-ups, just as he does not wear the same kind of clothing.

**Eating with Clean Hands.** Children handle things that are dirty. From the very first, their hands should be washed before mealtime. This is a good health habit for the child to learn early. Watch that the child does not pick up food that has fallen on the floor and put it in his mouth. Be careful also that he does not try to eat food from which others have taken bites.

**Sweets.** Honey and molasses may be used in moderation. The latter is rich in iron, and both contain minerals and vitamins. If the child has these occasionally with plenty of fruits and simple desserts, he will not need other sugar. Sugar should be used sparingly on fruits and cereals. It is much better to teach the child to like the fine natural flavor of the various fruits, cereals and vegetables than it is to "bait" everything with sugar to get him to eat it. The eating of sweets between meals dulls the appetite and thus the child is not hungry for the body-building and health-protecting foods. It seems that the more sweets a child eats, the more he craves.

### **Things a Growing Child Should Never Eat**

1. *Any combination of starch and grease.* All starch is partly digested in the mouth while it is being chewed. Nothing more is done to starch until it reaches the bowel. If starch is coated with grease the saliva does nothing to it and the bowel must do it all. This is hard on anyone's digestion, but es-

pecially that of a small child. For this reason, flour gravy, pie crust, fried potatoes or any other fried food should never be given to a child.

2. *Anything it cannot, will not or does not chew.* Raw cabbage, corn, cucumbers, radishes, popcorn, nuts, tough meat, etc., are examples of food unsuitable in this respect.

3. *Highly flavored, seasoned or spiced foods.* It is a serious mistake to give young children food flavored with pepper, spices, vinegar, or highly sweetened. This includes sausage, wieners, pickles, relishes, preserves, mustard, etc. This soon destroys the child's liking for simple, wholesome food and starts endless trouble and capricious refusal to eat what he should eat.

4. *Pancakes, biscuit or soft, fresh bread of any kind.*

5. *"Treats" between meals,* such as popcorn, peanuts, candy, pop, ice cream soda, etc., not only do a child no good whatever, but actually do him much harm by spoiling his appetite, overworking his digestive organs, and making him difficult to manage. Above all, a child should never be "bribed" with these things. Ice cream is a wholesome food when used with meals as a food. It should not be given between meals.

### Breakfast

**The Importance of Breakfast.** Breakfast is the key meal of the day. If the child does not eat enough breakfast he is cross and hungry in an hour or two and fusses until he gets a "piece." Then he is not hungry for his noon meal, and must have another "piece" in the afternoon. This becomes a daily occurrence and will make any child fussy, spoiled and subject to indigestion.

**Why Children Do Not Want Breakfast.** 1. *Too heavy supper the evening before.* If the digestive organs have had to work all night they are not yet ready to care for another meal.

2. *Eating too soon after rising.* A child who is brought from his bed to the table in his night clothes, or scarcely awake, cannot be expected to eat. Every child should have a drink of water on waking, and then be quickly washed and dressed and given a few moments to play out of doors, if possible, before being served with breakfast.

3. *Unappetizing food.* Too often the child who sleeps late is expected to eat cold, scrappy food. No matter how busy the mother is, nothing can possibly be as important as the matter of serving a fresh, well-balanced morning meal to her growing children.

In the long run she will save time by doing this, as a well-fed child will be a happy child and will not disturb her later by teasing for food.

**Feeding Problems.** Good eating habits have much to do with health, especially in childhood, the period of active growth. The child should learn early in life to eat at regular intervals, to eat a simple wholesome diet, and to take what is set before him. Coaxing and urging will not teach a child to eat, but most children with healthy appetites are ready to eat almost anything that is offered them. A child should come to the table hungry if he is to eat everything that is served him.

Little children imitate grownups and older children. Eating habits are not inherited. The child, who as a baby has been fed at regular intervals and who has received a variety of vegetables, fruits and cereals during the latter part

of his first year, usually presents no special feeding problems unless he comes in contact with persons whose fussiness about foods he imitates.

Meals should be served at regular intervals and no nibbles or sweets should be allowed between times.

Most children receive a fairly varied diet after the tenth or eleventh month; but a child, who until he is 12 or 15 months old has had a diet limited to milk, cereals or perhaps one vegetable must be taught to accept a variety of foods. This may not be easy, as a food of strange flavor or texture is often refused at first. If, however, a small amount, even a teaspoonful, of the new food is offered the next day and the next without any special urging, the child will learn to take it. If the child persistently refuses a food, it is wise to stop serving it for a week or ten days and then without any comment or emphasis, start again. He will probably have forgotten his objections and eat it willingly.

New foods should be offered when the child is really hungry, that is, at the beginning of the meal.

Occasionally a child will show stubbornness in his refusal to drink milk or to take a particular solid food, and it may become necessary to teach him to eat them by letting him get really hungry. If he is being taught to eat any solid food, a small serving should be offered at the beginning of the meal and the child told quietly that when he has eaten this food that he can have his milk and the rest of his meal. If it is refused, do not substitute any other food, not even milk, but remove the whole meal without saying anything or even appearing disturbed. Nothing but water should be offered until the next meal hour and then the same solid food should be offered again. If the child again refuses it, again the food must be removed without comment. Usually by the time the third meal is offered, the child's hunger is sufficient to overcome his stubbornness and he will take some solid food. This serving should be small, but it should be eaten before milk or other food is given.

Sometimes a child likes solid food best and therefore refuses to drink milk. The same method may be used here, by giving no other food until a small cup of milk is taken.

Ordinarily the wise mother will take the attitude of expecting the child to eat what is good for him, encouraging him without coaxing or urging him to eat. She will not allow meals to assume too important a place in the child's mind.

**The Child With a Poor Appetite.** The child who is constipated, who has large adenoids, bad teeth, who gets too little sleep, or who does not get enough outdoor life and fresh air, is likely to be finicky and delicate about his eating.

The child who eats too often or who is stuffed on dainties, or who is harried and nagged by a nervous mother, will not eat well.

A child who does not get hungry when strictly limited to three good, wholesome meals per day should have his sleep schedule lengthened, also his time for sunshine and fresh-air play. If he still fails to eat as he should, he should be examined by a physician and have his defects, if any, corrected.

Going without one or two meals may give the digestive organs the necessary rest and stimulation.

Rarely, if ever, should a child be forced to eat when he is not hungry. It is more sensible and more humane to find and correct the cause. This does not mean that he should be given food between meals if he is not hungry at his meals. The child who is not hungry at his meals should never eat between meals.

### **Foods for Health and Growth**

#### **DOES YOUR CHILD EAT THEM EVERY DAY?**

MILK .....	A quart for each child.
BUTTER .....	At every meal.
CEREAL OR BREAD..	At every meal. Use whole grain cereals often.
POTATOES .....	Once a day.
VEGETABLES .....	At least two daily other than potatoes. Use raw vegetables often, or those that are quickly cooked. Green, leafy vegetables should be used often.
FRUIT .....	Twice a day. Use citrus fruits or other raw fruits or tomatoes daily.
EGG . .....	Once a day.
MEAT .....	Several times a week and daily as the child grows older.
SWEETS .....	In small amounts at the end of the meal.

### **PROTECT YOUR BABY**

1. By vaccination against whooping cough before 6 months.
2. By immunization against diphtheria 9 to 12 months.
3. By vaccination against smallpox before 12 months.

## Chapter XII

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### THE BABY'S TEETH

#### A Message to Mothers and Expectant Mothers

**Teeth Are a Fairly Accurate Index to General Health.** Scientists are generally agreed that the mouth reveals a fairly accurate index to the general health. The mouth is the only part of the digestive system which can be easily examined. In the mouth are glands of secretion for the first step of digestion. The mouth also contains all five of the tissues that make up the human system; therefore, if abnormalities are found in the mouth, one may quite safely conclude that some law that governs health has been disregarded. Faulty diet, lack of proper intake of vitamins and general depletion of the mother are considered responsible for adverse conditions in formation of the baby's teeth. Every mother admires beautiful, healthy teeth and hopes that her baby will have a good set of teeth.

**What Can Be Done to Build Good Teeth for the Baby?** The buds of the baby's teeth start forming during the second month of the prenatal period. Most ordinary diets are known to be low in foods that build bones and teeth. The mother must not only supply her own needs for calcium for the upkeep of her teeth and bones, she must also supply sufficient amounts for the building of the bones and teeth of her child. Phosphorus is an element that is necessary to combine with calcium in this bone-building process. The interesting element which unites the calcium and phosphorus in a combination so it can be utilized by the body is called vitamin D.

Milk, cottage cheese, cheese, leafy vegetables, string beans, are foods high in calcium content. Lean meat, eggs, fish, fowl, etc., are foods rich in phosphorus and iron. Cod-liver oil, butter, animal fats and green leafy vegetables are sources of vitamin D.

Other vitamins of importance are: Vitamin A which promotes growth and which is supplied in milk and milk products; vitamin B which is supplied in whole grain such as beans, peas, whole wheat, etc., and vitamin C which is important because the lack of foods containing this element give symptoms of scurvy, such as sore and bleeding gums. Oranges, lemons, grapefruit and fresh uncooked fruits and vegetables supply this element. (Refer to Chapter III in Prenatal Diet.)

There are other factors over which the mother has little control, such as inherent family traits which affect assimilation and digestion, but if she follows the lines suggested in this booklet, she will give her child the best chance possible and at the same time protect her own teeth and health.

#### Mother's Dental Care During Pregnancy

As soon as pregnancy is discovered, the expectant mother should immediately go to her dentist and have all defects corrected. She need not fear "marking her baby." It is much less painful to have dental defects corrected than to suffer toothache. Almost any type of dental work can be done up to the eighth month of pregnancy.

### Nursing the Baby

Breast feeding is much preferred to bottle feeding. The mother's breast not only supplies the milk for the baby but supplies the proper exercise for normal development of the baby's face and jaws. If it is necessary to feed the baby from the bottle, the large breast-shaped nipple should be used. Take the bottle away from the baby as soon as he has finished feeding, the same as he would be taken from the breast.

### Time for Cutting Teeth

There is no exact time when certain of the baby's teeth will erupt and be shed, but the usual period is as follows:

	<i>Erupt</i>	<i>Shed</i>
Lower central incisors.....	6th to 8th month.....	6th year
Upper central incisors.....	7th to 9th month.....	6th- 7th year
Lower lateral incisors.....	7th to 9th month.....	6th- 7th year
Upper lateral incisors.....	8th to 10th month.....	7th year
Lower first molar.....	12th to 13th month.....	8th-10th year
Upper first molar.....	13th to 14th month.....	8th-10th year
Lower cuspid.....	15th to 17th month.....	11th year
Upper cuspid.....	16th to 18th month.....	11th year
Lower 2d molar.....	19th to 23d month.....	10th-11th year
Upper 2d molar.....	20th to 24th month.....	10th-11th year

First permanent molar erupts back of baby teeth in the sixth year.

### Care of the Mouth While "Cutting" Teeth

If the baby drinks enough orange, tomato or other fruit juices containing vitamin C, he will have very little trouble with his gums. If the gums should become sore, increase the amount of orange juice. Swabbing the gums with a solution of salt and soda ( $\frac{1}{2}$  teaspoonful each of salt and soda in a small glass of warm water) with gauze or a soft cloth, will often relieve the inflamed areas. Clean, hard objects like a long chicken bone can be given the baby to chew on to aid in cutting the teeth. The baby teeth should be wiped off each day with a salt and soda solution until the child is old enough to start brushing them.

### Care of the Baby Teeth

As soon as the child can learn to use the tooth brush, he should be taught to brush his teeth twice (at least once) a day. The salt and soda solution will do nicely if a good tooth paste is not available. From the time the baby is weaned until his eighteenth year, he should drink a glass of milk at each meal and eat food that demands hard chewing. Most impacted teeth and many dental ailments are the result of the parent's failure to insist that children eat hard foods and chew all food well. A child must be taught the habit of thoroughly chewing his food.

### At Three Years of Age He Should Make a New Friend

From the results of examining thousands of children, it is now known that at the age of three years, fifty children out of a hundred will have one cavity started in the baby teeth. The child should be taken to an up-to-date dentist, who will welcome his young visitor, will clean and fill the little cavity, and the whole experience will be done without pain. Tiny cavities grow to be large

ones. The intelligent thing to do is to have these cavities filled when very small, thereby avoiding toothache, too early loss of the baby teeth, the dread of a dentist and the possibility of a crooked set of permanent teeth. Never mention hurt or pain when speaking of a dentist to a child or in his presence. Baby teeth are important because the child must depend upon these teeth to chew his food until he is eleven years of age. They also guide the permanent teeth into their proper place in the jaw. Toothache is one of the severest pains the human being can experience. Negligence on the part of the parent to give regular care to the child's teeth, is comparable to sentencing the child to toothache.

### **The First Day at School**

The mother's face, on this momentous day in the child's life, reflects her emotions of pride and regret as she waves goodbye to her baby as he goes to school. With loving care she has selected clothing, shoes, had his hair trimmed and has attended to every detail in regard to his external appearance. A mother will do everything for the good of her child that she has knowledge of doing. It is only recently, however, that mothers have learned about the more important needs of her child. A child's ability to learn and to compete physically with his playmates is not governed by his clothes, but is definitely affected by his health. Clothes, school buildings, equipment and other appurtenances are simply tools with which to educate the child. The foundation on which the investment of moneys for all external requisites of education is made, is the health of the child. The important question on the first day of school is, "is the child physically equipped to take the first steps in preparing for citizenship?" The important things to know are: has the child any hidden infections in his mouth or throat which will hamper his normal physical and mental development or cause him pain during the school year; is his weight what it should be; have I been feeding him correctly; are his eyes in perfect condition; is he physically everything he should be? The intelligent mother will have her child examined from head to foot, and will have all defects corrected before the beginning of each school year.

A dollar spent for preventing sickness is worth \$100 spent for cure.

## Chapter XIII

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### TONSILS AND ADENOIDS

Signs indicating the necessity for an examination, by your physician, of the tonsils and adenoids:

(1) A great majority of small children will never complain of sore throat. For this reason, if the child is feverish, look at the throat.

(2) If the child has trouble with acute otitis media (inflammation of the middle ear), the tonsils and adenoids should be removed at the earliest opportunity.

(3) If the child has kernels which are easily felt in the neck, they indicate infection in the tonsils. However, the infection may have occurred some time previously and if the child is in good health, it may not mean the tonsils and adenoids need removing at once.

(4) Any evidence of rheumatism, chorea or heart trouble may indicate infected tonsils.

(5) Mouth breathing indicates mechanical obstruction to the breathing and not only will lead to changes in the child's face but may lead to other of the above-mentioned diseases.

## Chapter XIV

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### CARE OF THE TODDLER

#### The Air Bath

Every day, when possible, every child and infant or toddler should be undressed and allowed to frolic and exercise actively while stripped. This permits the child to have absolute freedom, accustoms his skin to air, and also (*very important*) *gives the mother a chance to watch her child's body grow and ascertain whether he is straight and well developed or not.*

#### Sun Baths for Older Children

Though sun baths are of primary importance for the baby, they are also of great value for the preschool child. Sun bathing is more important for the child than sea bathing, and it is accessible everywhere in spring and summer. Clothing for sun baths should be low in the neck, short in the legs, and without sleeves. An ordinary bathing suit or bathing trunks, a sleeveless slip or a set of cotton underwear may be worn.

Sun baths may be given in the fields, in a city back yard, on a roof, or on a porch, as well as on a beach. Care must be taken not to let the child's skin become sunburned severely. The best time for sun baths is the late morning.

Tanning is the goal for which to strive, and the process must be gradual. The exposure should begin with the face and arms and increase slowly in duration and in the extent of body surface exposed, until the whole body is exposed for two hours a day.

#### Chair and Table

When the child begins to outgrow his play pen he should be given a small chair in which he can sit upright with his feet on the floor, and he should have a play table at which he may sit as comfortably as an adult sits at his desk or table.

He should be encouraged to sit at this table for a good many of his play activities, especially the things that he otherwise would do crouching on the floor. Do not make this an irksome requirement, however. Lead him to use his chair and table because he loves them and not because he is compelled to do so, and especially do not fret him by trying to curb or limit his activity any more than actually necessary.

#### Constructive Play

Under conditions of modern family life the growing child is running all to legs. He may run, he may have a "kiddie kart" or a tricycle, *but he may not climb or dig*—the two things he most wants to do and the two things which will develop for him strong arms, back and chest muscles.

The crawling child will go up and down stairs safely before he can walk. This is splendid exercise, and he should be given frequent opportunity to go up and down a clean stairs while some one is watching him.

Always encourage him to come down as well as go up.

Above all things, do not startle children by yelling and jerking at them. Do not scold them because they are active and want to see how far they can go and how high they can go. This is natural, and within limits of safety, should be encouraged.

#### **Daily Schedule for the Toddler**

- 1—On awakening give drink of water, wash hands and face, brush teeth and dress.
- 2—Breakfast: Fruit, cooked cereal or shredded wheat, toast and butter, milk.
- 3—Brush teeth. Bowel movement.
- 4—Play until dinner in sunshine.
- 5—Dinner: One of the following foods for growth: a milk dish, such as cream soup or creamed codfish, dried beef, omelet, custard, eggs, fish, chicken, choice tender beef or mutton.  
One of the following vegetable foods for minerals, vitamins and "roughage": green salads, "greens," tender root vegetables, tomatoes, green peas, green beans, asparagus, squash, etc.  
One of the following fruits: apples, oranges, dried fruits, choice ripe fruits in season, choice canned fruits, raisins, prunes, etc.  
Or simple dessert, pudding of bread, rice, etc., gelatin, custards, plain cookies, etc.  
Dry, toasted or twice-baked bread, cow's butter.  
Glass milk.
- 6—Nap; bath and dress. (In winter give bath just before putting to bed at night.)
- 7—Play out of doors in sunshine.
- 8—Supper: Fruit sauce; vegetable; bread and milk or milk toast, or rice, or vegetable soup; or hominy or corn meal or Graham mush and milk. Glass milk.
- 9—Short play or story hour.
- 10—Bed not later than 7:30 p. m., and always at a regular time.

### **PROTECT YOUR BABY**

1. By vaccination against whooping cough before 6 months.
2. By immunization against diphtheria 9 to 12 months.
3. By vaccination against smallpox before 12 months.

## Chapter XV

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### CHILD MANAGEMENT

The health, happiness, and efficiency of the adult man and woman depend, to a very large extent, upon the type of habits they acquire from their training and experience during early life. All too frequently the fundamental importance of forming right habits in childhood is minimized or overlooked altogether.

Habits in regard to the care of the body—eating, sleeping, elimination, bathing—are easily formed and vitally affect health. Our manners are a collection of habits; we do a rude or a courteous thing almost without stopping to think. If we did not learn the muscular movements which become habitual through repetition we could never play the piano, run a typewriter, or gain skill in athletics. Of course, children must learn the simpler motions first—the use of knife and fork, the buttoning of buttons, and the tying of knots. The morals of most of us are, to a large extent, the result of habits of thinking formed in early life—our attitude toward the drinking of alcoholic liquors or the taking of others' property, or the problem of sex, as well as our attitude toward other people, whether sincere or deceitful, friendly or antagonistic. Most of our prejudices are the outcome of habits of thinking formed in childhood.

Care should be taken to see that children are early taught kindness and consideration for those less fortunate, for unconsciously they will form their attitudes from the home atmosphere.

All these tendencies toward thinking and acting in certain ways, which are called habitual, are the outgrowth of training and experience. They are not inherited. We begin to form habits at birth and go on through life, forming them quickly and easily in youth and more slowly and with difficulty as the years advance.

Since habit formation begins early and is more or less constant throughout life it is of great importance that emphasis be placed upon establishment of desirable habits.

A young child has certain characteristics that make the acquiring of new habits easy. For one thing, he is suggestible; that is, he accepts without reasoning about it anything which comes from a person he looks up to. "My father said so," or "My mother did it" makes a thing absolutely right for a little child. Again, a child naturally tends to imitate the words, actions, and attitudes of the people around him, and this makes it of the greatest importance that older people furnish him the kind of models they want to have copied. Furthermore, a child wants to please those he loves and wants to have them say so. At first it is only father or mother or some one in the immediate family whose good opinion he wants. Then it is the kindergarten or school teacher. Finally, at 9 or 10, the praise or blame of his playmates or of the gang leader concerns him more than anything else. When this stage is reached parents should not be disheartened and think that their boy is developing into a black sheep. It is a perfectly natural stage which children

pass through and which calls only for greater care in the selection of wholesome companions.

This attitude of concern regarding what other people think is a force that parents may use in developing right conduct. Rarely is a child found who does not care for the approval of some one, and training should make a child realize that it is to his advantage to win approbation for desirable acts. Praise for unselfishness, kindness, and general consideration for others tends to perpetuate that type of conduct.

Some parents play upon a child's natural sympathy for others until it becomes like a worn-out elastic band which has been stretched till it is useless. "Don't make a noise; mother's head aches," may make a child sorry for mother at first, but if it interferes with every bit of happy play he has he soon learns to be hard-hearted about it. On the other hand, real sympathy for others, which is one of the finest qualities of personality, may be developed by training and form the basis of a habit of kindness and understanding which will last throughout life.

A child lives a real mental life, full of hopes, ambitions, doubts, misgivings, joys, sorrows, and strivings that are being gratified or thwarted much the same at three years of age as they will be at thirty. The home is the workshop in which the character and personality of this individual are being molded, by the formation of habits, into the person he will be in adult life.

Always avoid bribing, and do not make promises which you know you cannot or do not intend to keep.

A child should be treated with as much courtesy as an adult. Children have affairs and plans of their own which they are following. These plans are frequently utterly disregarded by the "grown-up." If they must be interfered with, let it be with some explanation and consideration for the children.

Threatening a child is a common method of setting out to obtain control. It is, however, useless and inexcusable. The simple statement of what will follow if a child persists in disobeying cannot be considered a threat if the promised results really follow.

It might here be said that one of the fundamental rules of child training should be that parents present a united front to the child. If differences in judgment occur, let them be settled in private.

There is no finer or more important job than being a parent. This generation or the next will not handle it perfectly. There is a great deal to learn, but much will be accomplished if the approach to the problems of childhood is not blocked nor impeded by anger, fear, oversolicitude, or the idea that being, a parent means at all times being obeyed. Kindness, common sense, and an effort to understand the child's own attitude toward his difficulties will do much to bring about an intelligent solution for most of the problems.

An excellent booklet on "Child Management" will be sent free of charge upon request to the Kansas State Board of Health.

## Chapter XVI

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### OCCUPATION AND PLAY

#### Play is Education

No one in the whole world works harder or is more in earnest than the child at play. Never again will he learn as much or as fast as he does during his play years, providing he is given freedom to play. People used to think that the preschool years were idle years and that a child played merely to fill in the time until he should be old enough to be put at some useful task. We now know that nature teaches the child through play, and that he is educating himself and preparing himself for the serious business of living and that he is doing it with great industry and seriousness.

When a kitten chases leaves or wrestles playfully with its mother it is preparing itself to catch mice. When a little girl plays that her doll is sick she is preparing herself for motherhood. When a boy digs a cave in a back yard or builds a coop in a tree, he is preparing himself to become a useful citizen.

**Children Must Be Busy.** The sooner the mother realizes this and provides her children with plenty of interesting occupations the less trouble she will have and the happier every one will be. The mother who fails to provide interesting occupation for her active children has no one but herself to blame when they get into mischief in their search for something to do.

**Simple Playthings are Best.** Most of the money spent for toys is worse than wasted. A flimsy, painted, ready-made toy which soon falls to pieces not only gives the child very little pleasure, but demoralizes him by its shoddy workmanship and by its example of unwise expenditure of money.

Children do not want to sit and look at a beautifully painted engine or a doll so daintily dressed and so expensive it cannot be enjoyed in play. They would far rather spend hours putting an engine together out of odds and ends from a junk pile, or dress and undress and feed and nurse and love and discipline a homely, comfortable rag doll.

The possibilities of a box of painted building blocks are soon exhausted. The possibilities of a load of mill ends from the planing mill will never be exhausted by one family or one neighborhood.

Mothers often oppose the disposition of children to collect "junk." They cannot understand what the child sees in a pile of rubbish. Clean junk is valuable play material. The mother should constantly have her children's play needs in mind and save everything they can make use of, such as string, boxes, spools, colored paper, colored rags and worn-out utensils, etc.

Every child should have a sand pile; a sand box is better for the baby. The sand should be boxed in so it will not be trampled into the ground. It should hold a lot of sand. Three loads at one time will last longer and give much more joy than one load three times a year.

A load of "two by fours" (seconds will do) sawed up into real bricks will provide wonderful manual training for all the children of the family, if not

the neighborhood. A load of mill ends added to this will make the children happier than all the toy pianos, wagons, wooden autos and flimsy, painted toys in a whole toy store.

Girls would rather play with discarded kitchen utensils and dishes and make real mud pies than to try to "make-believe" with the useless little sets offered in the stores.

**A Place to Play.** The only way to keep children "out from underfoot" is to recognize their rights, as members of the family, to a place to keep their things and a big roomy place to play. They should have a play room if possible. A garret or attic may be given over to them. This room should be kept free from dust, but the wise mother will not nag too much about "clean dirt."

Children always should have an outdoor playground where they may collect playthings, dig ditches and caves, build cities and do anything they like. A painter's ladder, a low turning pole and a low trapeze should form part of the equipment of this playground.

### **Mother and Father Should Play**

Nothing will establish a firmer bond or closer understanding between parents and children than for the parents to play with them frequently, or even occasionally. A little tactful direction will help children to get more out of their play. When mother "plays house" she can suggest to Mary that of course she must always wash her dishrag and hang it in the sun, and that the sick dolly's feet must be kept warm and that baby dolls need fresh air, and show her how to put the baby's clothes on over its feet instead of its head, etc.

Father can show John how to mortise his bricks together and how to make a firm corner, how to clinch a nail and many other helpful things. Father and mother should also play games with the children. Parents often fail to realize that children cherish the memories of this kind of comradeship and that they thus form a lifelong hold on their children.

### **Play for the Baby**

The first playthings go into the mouth and are in the mouth most of the time. For this reason the first playthings should be boilable. Here again simple household things give as much pleasure as those which are purchased. A teaspoon, a small doll of white rags which can be boiled, strings of spools, stout strings of colored wooden beads, all give the baby material with which to develop coördination of his muscles and sight and keep him busy and happy. The baby should have a play pen and should never be permitted to put dirty playthings in his mouth. Sterilizing the playthings by boiling them should be one of the day's rites.

## Chapter XVII

### THE SCHOOL CHILD

#### Getting Ready for School

During the entire five years of preschool life the mother should be looking forward to the duty and pleasure of turning that child into the public school in 100 percent condition as to bodily health and early training. The mother who does not do this does not do her duty to her child, and her child will carry a handicap through life because of her failure.

Every child should have a health examination by a doctor and dentist twice a year, and defects should be corrected as soon as they appear. In the spring and before the child is ready to start to school in the fall, he should have a thorough examination, including tests of sight and hearing. The mother should spend the entire summer, if necessary, in finishing the preparation of the child for his strenuous school life. She should be absolutely sure that he is up to normal weight, that he breathes easily and freely, that he can see well and that he can hear well. *He is not fit to go to school if he is lacking in any one of these respects.*

#### After the Child Starts to School

The school child must be understood and protected at home if he is to come safely and profitably through the eight to twelve strenuous years he spends in the public school. The following may be called "ten commandments for parents of school children":

1. See that the school child gets at least nine, and preferably ten, hours sleep before every school day. There should be no going out in the evening or sitting up late between Sunday evening and Friday evening.

2. See that all school children eat a nourishing breakfast and go to the toilet before going to school every morning.

3. Help the older school children so to plan their work and learn to concentrate their study that they will not need to study at night. Six hours continuous, concentrated brain work is enough, if not too much, for any growing child. A little direction in method will do much in helping the child to do this work efficiently but speedily.

4. See to it that every child has outdoor exercise after school every day.

5. See to it that all children, especially adolescent girls, go to bed with warm feet.

6. See to it that both boys and girls are dressed simply, healthfully and attractively. Well-fitting shoes with low heels and broad toes are especially important.

7. See to it that the school child is weighed every month and keep him gaining.

8. Be sure that the schoolroom is properly lighted and ventilated and that the water supply and sewage disposal are sanitary and safe.

9. See to it that your school child has proper recreation and makes plenty of safe, wholesome friends.

10. Keep the confidence of your school child and tell him fully and freely everything he wants and needs to know about life. *Don't put this off.*

### **PROTECT YOUR BABY**

- 1. By vaccination against whooping cough before 6 months.**
- 2. By immunization against diphtheria 9 to 12 months.**
- 3. By vaccination against smallpox before 12 months.**

## Chapter XVIII

### CONTAGIONS OF CHILDHOOD

#### Common Colds

The "common cold" is the American plague. The mucous lining of the nose and throat is one of the most sensitive and important organs of the body. When it is inflamed it cannot protect the body or perform its work. The whole body suffers and becomes less able to resist disease. For this reason many severe illnesses follow common colds. Pneumonia is one of the commonest sequels of a cold.

**Prevention of Colds.** Every mother should try to prevent her children from taking cold by keeping the air of the home fresh, clean, moist and cool rather than hot, by letting the children play freely out of doors every day, and by daily bathing.

She will also protect her children in every possible way from contact with persons having colds.

The mother should take every precaution to keep her baby from getting the germs of the common cold. *No one should ever kiss any child on the mouth.*

If the mother has a cold she should scrub her hands before touching the baby and should avoid breathing on him. She should not blow her nose nor handle her handkerchief while caring for the baby.

**Treatment of Colds.** 1. Keep the child having a cold away from other children. It is not right to permit other children to become infected through any mother's carelessness. *Keep the school child at home.* This is for his own sake, in order that he may quickly get over his cold; for the school's sake, because nothing is more demoralizing to school work than an epidemic of "colds," and also because no one, not even a physician, can be sure whether it is a cold or the beginning of measles, scarlet fever, or one of several other contagious diseases.

2. If the cold is slight and the sun shines, keep the child in the open air and sunshine all day. This is the very best way to break up a cold.

3. If the weather is unpleasant or the child has fever, keep him in bed for one day. Provide him with plenty of quiet amusement and make it a quiet, happy day of rest. He will be a "new child" the next day.

4. Be sure the bowels are open, give light, nourishing diet with an abundance of juicy fruits and fresh water.

5. Provide him with paper napkins or rags with which to blow the nose. Pin a paper sack to the side of the bed and let him drop them in it as used. Train him to be careful about this from the start

6. Have the child thoroughly blow the nose just before eating and before sleeping.

7. Teach the child to blow both sides of the nose at once without holding either nostril. Forceful blowing of one side may force infection into the middle ear.

8. Take the temperature every four hours if the child feels ill or appears feverish.

*Remember:* What appears to be a cold may be the onset of some severe illness; that colds are highly contagious; that it is much easier to prevent serious complications if early care and treatment are instituted. The physician should be consulted with the first symptoms of illness.

### Other Contagious Diseases of Childhood

Pamphlets describing the cause, symptoms and home care of measles, mumps, whooping cough, chicken pox, infantile paralysis, scarlet fever, diphtheria and typhoid fever may be obtained free from the State Board of Health. Every mother should write for these pamphlets and read them. Only a few especially important points will be mentioned here.

**Measles.** Measles is one of the most dangerous diseases of childhood. It is often followed by bronchial pneumonia, which is frequently fatal. It is also liable to be followed by eye trouble, ear and throat trouble. It is also often followed by tuberculosis.

Mothers should fear measles and make every effort to keep their children from catching this disease. A child who has measles should be treated as a sick child and should be under a physician's care, as complications are more apt to follow a mild case which is neglected than a severe case which receives good care.

**Whooping Cough.** Whooping cough is especially fatal in infants and young children. If a school child has whooping cough the baby in the home often catches it from the school child and dies. This is one important reason why children who appear to have a cold should be kept away from other children, and especially away from the baby and younger children.

A child with whooping cough should be kept in fresh air day and night. If he vomits much he should be given liquid nourishment, such as pasteurized milk, malted milk, buttermilk, plain eggnog, etc., after every paroxysm of coughing, in order to keep up the strength.

A firm abdominal binder gives comfort in coughing and also lessens the danger of rupture.

Whooping cough (pertussis) vaccine is available for the protection of children against this disease. The effectiveness of vaccination has not been accurately determined. It will probably protect a fairly high percentage of children who receive it. Vaccination must be done during the first few months of life, preferably before the sixth month.

**Chicken Pox.** Chicken pox is one of the mildest of the eruptive diseases if properly treated. The child should be isolated and guarded against exposure, and it should always be borne in mind that chicken pox and mild smallpox are not infrequently mistaken for each other.

**Smallpox.** The infant should be vaccinated against smallpox before the age of one year. Vaccination during the first few months of life causes less reaction than at a later age. The multiple pressure method is efficient, safe and causes a minimum amount of reaction and discomfort. This will probably afford protection until ten or twelve years of age, when a second vaccination is recommended. As the duration of immunity varies in different people, it is

well after this to be revaccinated about every seven to ten years. If one is immune it will not "take"; if immunity has run out one should know it.

Women should be protected against smallpox during their childbearing years, as the disease is especially dangerous to pregnant women and to unborn babies.

**Scarlet Fever.** Scarlet fever is a treacherous disease because it is liable to be followed by diseases of the kidneys, heart, ears, nose and throat and by other complications. Any child who has had even a mild case should be under a physician's care in order to prevent or detect such complications.

Immunization against scarlet fever may be done by the injection of scarlet fever toxin. This procedure has the disadvantages, however, that five doses are required, unpleasant or painful reactions frequently result, and there is uncertainty in obtaining immunity in some cases. For these reasons it has not been universally adopted. It is useful, however, in many circumstances and should be used on the advice of the physician under such conditions.

**Diphtheria.** A remarkable advance in modern medical science has been the development of "toxoid," a simple and harmless immunizing agent for the prevention of diphtheria. All children should be immunized soon after reaching the age of nine months. Diphtheria is most dangerous to children less than six years of age.

The physician should be called at the first sign of a sore throat. What appears to be a simple sore throat may be the most dangerous case of diphtheria.

**Mumps.** Mumps is often too lightly regarded, as serious glandular involvement sometimes follows, especially if the patient is careless about exposure. Any child with mumps should be kept warm and quiet and guarded against exposure.

**Infantile Paralysis** (poliomyelitis.) Infantile paralysis is a contagious disease occurring usually during the late summer months and most commonly among children. Early symptoms may resemble those of many other contagious diseases. Symptoms are so slight frequently as to go unrecognized until paralysis appears. Not all cases have paralysis and the paralysis is frequently not permanent. It is important that the child be kept absolutely at rest in order not to stretch and permanently damage the affected muscles. For this reason it is important to call a physician if the child shows any signs of illness. A so-called "upset stomach" is frequently an early symptom.

After the acute stage has passed the physician can advise muscle training exercises that will help restore the usefulness of injured muscles.

**Typhoid Fever.** Typhoid fever is a serious disease which could be entirely eradicated. Despite this fact, several thousand deaths occur from this cause in the United States each year.

Typhoid germs are found in the intestinal discharges of cases or typhoid carriers. The germs gain entrance to the body of the well person through food, milk, and water, that have become soiled with these discharges.

The germs from an insanitary toilet may contaminate a water supply. The germs may get into milk through carelessness or lack of cleanliness of milk handlers. Flies sometimes carry the germs to infect food. Patients who have recovered may remain carriers and discharge the germs for years.

Typhoid fever may be prevented by (1) the use of pure water, pasteurized milk and clean food protected from flies; (2) vaccination which protects for two or three years; (3) use of sanitary toilets or sewerage systems for disposal of human excreta; (4) cases and carriers should be reported immediately to the health department.

## Chapter XIX

### ILLNESS AND EMERGENCIES

#### Equipment

Every mother should keep certain things on hand for use in the common accidents and illnesses of children. A mother who lives at a distance from a drugstore and a physician will need more emergency supplies than one who lives in town.

The following things should be kept in every home medicine cupboard where there are children in the family:

Two ounces of iodine or mercurochrome, with a jelly glass full of tooth pick swabs. (NOTE: Iodine should be fresh and not applied on wet skin.)

Two ounces of aromatic spirits of ammonia, for stimulant in emergency. (NOTE: May be inhaled or taken 15 drops in hot water.)

Tube of sterile vaseline.

One small roll of adhesive tape.

Bandages (4 narrow finger bandages, two 2-inch bandages).

Small package of sterile gauze.

Small package of surgeon's cotton.

One clinical thermometer (the family physician or nurse should be asked to show the mother how to use it).

One pint of mineral oil. (Dose: One to four teaspoonsfuls according to the size of the child.)

One infant syringe or catheter and funnel.

One fountain syringe or irrigating can for older children or adults.

Roll of clean old muslin or linen.

Roll of old woolen pieces.

One splinter forceps.

#### Patent Medicines

Every known drug and medical substance has been studied and listed in the United States Pharmacopoeia. No new substance has ever been found in any patent medicine.

All drugs are two-edged swords and affect many other parts and organs besides the ones they are supposed to help.

A drug may be given to dry up a cough and it may at the same time check the elimination from the skin and kidneys and constipate the bowels.

A pain relief may depress and weaken heart action.

A patent cathartic is nearly sure to create chronic constipation.

When a mother buys a medicine about which she knows nothing except that it is guaranteed to cure a cough or the colic or "worms," she does not know what injury she may be doing to some other part of her child's body.

It is both foolish and dangerous to experiment with unknown drugs.

Medicines and drugs are all right in their place, but should be prescribed

for a particular condition by a physician who knows just what results he wants to obtain and just how long it is wise to continue to give the particular remedy.

Use only drugs prescribed by a physician who knows and can observe their reactions.

### Poisons

Poisons should be kept entirely separate from other medicines for family use, so that a special effort is necessary to obtain them, thus obviating the danger of taking them "by mistake."

### First Aid in the Household

**Indefinite Illness.** When a child droops, stops playing, appears heavy-eyed, perhaps a little feverish, does not care to eat, but does not complain of any particular ache or pain, it is impossible for any one to say for sure what is wrong with the child. He may have an indigestion, a cold, or he may be coming down with some serious illness.

There are certain things which should be done in every case without waiting to see what is going to develop:

1. Undress the child at once. Look at his throat; see if his ears are tender; if his abdomen is bloated or tender; take his temperature and write it down.
2. Give the child a soapsuds or warm salt-water injection (2 level teaspoonfuls of salt to the quart) to wash out the bowel.
3. Give a warm bath and put to bed.
4. *Keep other children out of the room.*
5. Give water to drink freely and often, but do not offer solid food. Boiled milk only should be taken, and it may be better to eat nothing.
6. If the throat appears red, if there are white patches on the throat, if the ears hurt or the glands under the chin are enlarged, report to the physician at once.
7. If the child's condition has not improved within four to six hours, or if fever continues to rise, or is over 102 degrees, or if the child coughs or jerks, complains of backache or sore spine or any other symptoms of severe illness, send for the physician at once.

**Diarrhea.** For the nursing child, see "The Baby's Bowels," chapter VIII. For an older child, arrange to see the bowel movements and be able to describe them accurately to the physician if it becomes necessary.

Give no solid food. A glass of boiled milk may be given every four to six hours if condition does not become worse and child wants food.

Give all the water the child can be induced to drink at frequent intervals, hourly at least.

Keep exact record of number, time and appearance of bowel movements.

Take child's temperature every four hours.

If fever develops call a physician at once. If condition is not improved within twelve hours call the physician anyway.

**Constipation.** It is much better to prevent than to treat constipation. If a child is properly fed and goes to the toilet at a regular hour he will seldom or never become constipated.

If a child's bowel does need cleansing, an enema (injection) to wash out the lower bowel is all that will be necessary.

Lasting injury may be done to a child's bowel by the indiscriminate giving of physics.

**Convulsions.** A child coming down with an illness may have a convulsion whereas an adult may have a chill.

A convulsion may be caused by poisons from undigested or putrefying food in the bowel or by the poison of disease in the blood.

The first thing to remember is that, although a convulsion is a terrifying thing to see, children practically never die in convulsions.

The mother must not lose her head. She should do three things and do them quickly and efficiently: First, apply heat (in older children immerse in warm water); second, call a physician; third empty the bowel.

If enough warm water can be quickly obtained to cover the baby, put the child in a warm bath as quickly as possible. Be sure the water is only pleasantly warm to the elbow so as not to *burn the baby*.

If the convulsion is a severe one, do not try to undress the baby; but put him in the warm water, clothes and all, and undress after he relaxes.

If only a little warm water is quickly available, give a warm foot bath while more water is heating. Put a little mustard in this, but never put mustard in a full body bath, especially with the clothing on. It is very easy to blister and irritate the tender skin, and it is not necessary.

Always put a cold, wet cloth on the child's head while in the hot bath. Take out of the bath just as soon as the spasm relaxes. Dry carefully and keep the child very quiet. While sending for the physician wash out the child's bowel, but use a bedpan and disturb the child as little as possible while doing it.

When the child becomes quiet take the temperature and write it down.

If the child has fever or complains of headache, keep a cold, wet cloth on the head.

**Worms.** Never give patent worm medicine, and never give other medicine for worms without being *sure* the child has them.

Roundworms are near the size and somewhat the appearance of small fishworms. Seat worms, or thread worms, are very small, resembling bits of very fine white thread. Be sure that bits of vegetable fiber are not mistaken for worms.

The traditional symptoms of worms, such as "picking the nose," "a white line around the lips," etc., are entirely unreliable, and no child should ever be given worm medicine because of these. He is more apt to be suffering from chronic constipation.

Worm medicine is very powerful and irritating to the bowel. It should never be given without a physician's orders.

Worms will very seldom appear in a child whose bowels are regular and in a healthy condition.

**Cough.** When a child has a cough watch his condition very carefully; take his temperature every four hours and report promptly to a physician if fever develops.

Do not give cough mixtures which are not prescribed for the particular case, as what will help one kind of a cough may make another kind worse.

A cold, wet compress around the throat will relax the muscles and make a

child more comfortable, especially at night. To apply cold compress wring a couple of Turkish wash rags out of very cold water, apply to throat and wrap throat in dry towel to protect clothing from dampness.

At the very beginning of a cough lighten the child's diet, giving him an abundance of liquids, with little solid food. Be sure the bowels are free. *Keep him away from school and from other children.*

One day in bed will usually clear up a bronchial irritation. This easily runs on into weeks if it is neglected.

**Croup.** There are two kinds of croup—spasmodic and membranous.

*Membranous croup.* This is one form of diphtheria. The child chokes and struggles for breath because he is being strangled by the membrane which is growing in his breathing passages, and he will very quickly die if not relieved.

Membranous croup comes on gradually. The child droops and appears ill, has some temperature and has a hoarse, "brassy" cough, and it gradually becomes more difficult for him to breathe. This becomes so difficult finally that he begins to struggle for breath and gets blue in the face. This stage may be reached in twenty-four to forty-eight hours from the beginning of the trouble. The mother should watch sharply for this type of illness and obtain medical attention in time to avoid this terrible crisis.

*Spasmodic croup.* In spasmodic croup the child goes to bed apparently as well as usual, or he may have had a slight cold or a mild digestive disturbance. The attack comes on suddenly and violently. He wakes up with a shrill, whooping cough and struggles for breath. This is terrifying, but not dangerous. The mother should keep calm and assure herself that the child is not going to choke to death. She should heat water as quickly as possible, wring a couple of wash rags or a small Turkish towel out of hot water and apply to child's throat. Make the child drink at least a pint of water as hot as he will take it. A little salt may be added to the water. Keep the child warmly covered. A cold, wet compress will relax the spasm almost as quickly as the hot application.

In an emergency wrap a clean rag around the forefinger and tickle the child's soft palate. Be careful not to scratch or injure the throat.

Breathing steam is also good. Bring a teakettle of boiling water to the side of the bed, raise an umbrella and place over the child; throw a blanket over this and let the blanket also cover the spout of the teakettle. If possible keep boiling with a sterno lamp. Drop a red-hot stove hook or other small iron article in the water to keep up steam, if no small heater is at hand. Do not continue this steaming for more than ten to twenty minutes.

After the attack is over the child will be very much relaxed, tired and sweating, and will take cold easily. He should be well rubbed all over with a rough towel and have warm, dry clothing and bedding. He should not be kept so warm he will continue to sweat.

**Toothache.** It is far better to prevent toothache, as toothache always means neglected teeth.

**Earache.** Suspect earache in an infant who cries, turns head from side to side, cries out when head is moved or ear touched. Apply warmth by using hot water bottle or fill a small sack about half full of salt or sand, heat in the oven, fold in a soft cloth, and apply to the ear. See a physician as soon as possible.

**Foreign Body in Eye.** Wash hands in soap and hot water; scrub nails. Carefully seize the upper lid, pull it down over the lower lid and hold for several seconds. The lashes of the lower lid will act as a brush, and usually the substance will stick to them.

If this is not successful wash the eye out with warm boric-acid solution or boiled water. The solution should be kept tepid or "blood warm." Lay the child on his back, separate the lids with the first and second fingers of the left hand and gently drop in several pipettes of the solution. In the absence of a pipette use a clean teaspoon, and let the solution dribble in.

Sometimes the object can be seen; in this case roll a clean handkerchief to make a sharp corner and pick up the object with it.

**For a Bruise or Blow to the Eye.** Apply either hot or cold compresses for twenty minutes at a time; repeat every two hours. Either heat or cold will reduce the pain and inflammation, *but it must be one or the other*. If the application is hot, it must be kept hot; if cold, it must be kept cold.

**Foreign Body in Ear.** If the child has pushed a seed into his ear it will be safer to use warm oil, as water may cause it to swell. Fill the baby's infant syringe with either warm oil or water and gently syringe out of the ear until the object comes away. *Do not try to remove it by poking or digging.*

**Foreign Body in the Nose.** Get the child to blow while holding the other side. Provoke sneezing by inhaling pepper or powdered spice of some kind. (Protect the eyes with a wet cloth while doing this.) Never try to remove by force. If the child cannot blow or sneeze it out, see a physician.

**Foreign Body in Throat.** If a child chokes on something, holding by the heels and giving a smart slap on the back will usually dislodge the object. If it has really entered the windpipe, try to control the child's panic, persuade him to try calmly to breathe anyway, and take him to a physician with all speed.

If the child swallows a foreign object, do not worry unless it is something sharp or possibly poisonous. Give the child a dry, bulky diet and watch the stools until the article comes through. Do not give a cathartic. If the article has sharp corners or points, it is safer to have a physician locate and watch the object with an X ray.

**Small Scratches and Cuts.** Dip a toothpick swab in iodine and paint thoroughly once. Do this with even the smallest break in the skin. Small injuries heal best with a dressing. If too large to scab over quickly, place a bit of surgical gauze over the abrasion and bandage after iodine is dry.

**Deep Wounds and Cuts.** A cut made with a sharp clean knife and *which bleeds freely*, may be drawn together with adhesive strips after washing with warm water and soap. The skin should then be dried and swabbed with iodine and a dressing of surgical gauze snugly applied with adhesive tape or a bandage. Do not bandage over moist iodine.

If the wound is ragged or has been made with anything which has touched the soil, or with a blunt or dirty instrument, or if it is a puncture wound, such as is made with a nail or a splinter, it should be thoroughly washed with soap and hot water. Swab with iodine and *call a physician*, as tetanus germs abound in the soil and a few of them may remain in some tiny place in the torn flesh and produce lockjaw. Tetanus antitoxin should always be administered.

A kick from a horse's hoof, or puncture from a rake tooth, pitchfork or a nail are especially liable to produce lockjaw (tetanus.)

**Bruises.** When the skin is not broken apply hot or cold compresses.

**Burns.** For small burns which only redden the skin, or for small deep burns, bind on a compress, wet in soda water; keep wet by pouring a little solution under the edge of the dressing.

For a blistered surface apply sterile vaseline on a piece of surgical gauze. Do not break the blister if it can be avoided. If necessary to open a blister, prick it at the lower edge with a needle which has been held in a flame to sterilize it.

For a large burn, if on the hand, arm or foot, prepare a foot tub, wash-bowl, dishpan or other receptacle large enough; scald and scour it quickly, fill with warm salt water (about one tablespoonful to the gallon), and immerse the injured part in this. Carefully cut away the garments. Replace salt water with clean water, but keep the burned area covered with the water until the doctor arrives.

If the burn is in a place which cannot be immersed, cover it with thick, soft, clean cloths wet in either salt water or soda water.

If necessary to take the patient to a doctor, keep the burn covered with the wet dressing.

Considerable shock sometimes follows a burn, and there may be absorption of very poisonous material from the burned surface. Moreover, the newer methods of dressing burns can only be used by a physician. Therefore, do not neglect burns that are at all serious.

**Shock.** If a child has a hard fall or is knocked breathless or collapses, or faints from fright or injury, lay him down without a pillow, give fresh air; bathe face with cold water. Examine for broken bones.

As soon as the child is able to swallow, give a hot drink. Keep everybody quiet and away from sight and hearing of the child, and allow absolute rest.

Send for the physician if child does not revive and improve within a few minutes.

**Sprains, Dislocations and Broken Bones.** When a child has suffered an injury where a sprain or broken bone is suspected, as shown by pain or disinclination to use the joint or limb, the following rules should be followed:

1. If the pain is severe and seems to be about the neck, back or hips, do not immediately lift or double the patient. Keep him warm until the physician or some trained attendant arrives, or if he is transferred, handle him carefully on a flat board or a cot. Do not double him up in a hasty effort to get him into a car, as a severe injury to the spinal cord might thus be made worse.

2. If a shoulder is the injured part, place the arm in an ordinary triangular bandage sling around the neck, before the doctor arrives or the patient is moved.

3. When arm, leg, elbow, wrist, ankle, knee, or hip is injured, grasp the hand or foot and pull gently, but with considerable force in an effort to straighten the limb, then use a padded board or splint and bandage same snugly about the limb to hold the limb straight and quiet until the patient can be transferred to a physician. Many injuries occur to blood vessels.

nerves, and soft tissues when a fractured bone is not splinted before the patient is moved. If a fracture is bleeding, or the bone protrudes from the skin, cover with any clean cloth available and bandage snugly on the splint, while the limb is being held as straight as possible. Do not try to replace the bone, and only control the bleeding by snug bandaging and the application of a tight bandage above the bleeding points if the bleeding is severe.

4. Do not treat a supposed sprain of the ankle or wrist without the advice of your physician. You might have a broken bone, and if there is any doubt the X ray will solve the question.

**Red Cross Highway First-aid Stations.** The American Red Cross has established first-aid stations on many of the principal highways in Kansas. These stations are equipped for your use and protection in the event of automobile accidents. The attendants are also trained to render adequate first-aid treatment and to assist in calling ambulances and medical service.

**Insect Bites and Stings.** Insect bites should be dressed with a pad of soft, clean rag wet in soda or other mild alkali.

**Snake Bites.** If bitten by a poisonous snake, quickly tie a stocking, handkerchief or other cloth loosely above the wound, place a pencil or stick under it and twist it tight enough to shut off circulation. Suck the wound, spitting out all saliva while so doing. After ten minutes loosen the bandage for a few seconds to let new blood to the limb (otherwise gangrene may result); then repeat until sure the person is not going to be severely poisoned.

Obtain the services of a physician as soon as possible. Put the patient to bed and keep him quiet until the physician arrives.

**Dog Bites.** If a healthy pet merely nicks the hand of a child, in play, treat as any other small wound, with iodine and when dry, bandage.

If a dog or other animal has intentionally bitten a child, imprison the animal and treat it kindly. The imprisonment should be maintained until it is definitely known whether or not the animal is rabid. Swab the wound thoroughly with iodine and take the child to a physician as soon as possible, in order that antirabic treatments may be started.

**Nail Biting.** Nail biting is an indication of a nervous condition of the child. Nails should be kept smooth and rounded. If the child persists in biting his nails, the family physician should be consulted in order to discover, if possible, the underlying cause.

**Bed Wetting.** This is often the result of the lack of early training. Sometimes the male child needs circumcision. Some children need treatment for nervous instability.

*Treatment.* Never punish or humiliate, and never give bedtime medicines without definite orders from a physician who has given the child a thorough examination. *Each is an injustice and an injury to the child.*

Study the case carefully, and have a physical examination made. If it seems quite certain that it is only a habit, begin patiently and persistently to correct it. No habit can be quickly broken; it is a matter of training.

First, take the child into your confidence and get his coöperation. A confidential arrangement which will save the child's self-respect will arouse him to make a real effort. With small children the promise of a gift or a treat is legitimate. With older children the kindly, frank talk is sufficient.

Second, watch for several nights and make a schedule of the hours the accident is likely to occur.

Nervous children sometimes urinate as soon as they sink into a deep sleep and really relax. This kind of child should lead a very quiet life and should be kept especially quiet and tranquil in the evening. When he goes to the toilet at bedtime let him sit quietly on the toilet while mother tells a story or diverts his attention.

If it is found that the child urinates at a certain hour later in the night, set an alarm clock to go off just before this time and get the child up. Set the clock a few minutes later every evening until the habit is broken.

Putting a diaper on an older child (kindly, not as a humiliation) will sometimes serve to remind him to get up.

The child may be limited as to fluids, such as water and milk, after four or five o'clock, *if he has had his full twenty-four hour ration of fluids earlier in the day.*

One of the most stupid things, next to giving medicines, that is ever done to bed-wetters is to limit them in the fluids necessary to their health. Patience and perseverance are essential and will be rewarded by success if the parent is wise and kind.

**Masturbation.** This is a common habit among children, practiced by rubbing the genitals with the hands, or by rubbing against various objects. If the baby is seen to be carrying on this habit, every effort should be made to break it as soon as possible, as it grows worse if left uncontrolled. It may be due to lack of cleanliness, or to some local condition which irritates the sensitive parts, and, for this reason, it is well to have the baby examined by the physician. The treatment consists almost entirely in imposing mechanical restraints, and in great attention to keeping the parts clean. Wet or soiled diapers should be removed at once and the child made clean and dry. A thick towel or pad may be used to keep the thighs apart while the baby is asleep, and the hands may be restrained by pinning the nightgown sleeves loosely to the lower sheet when putting the baby to bed for the night. Such a baby should not be left awake alone in bed. Constant and patient watchfulness on the mother's part are required to break this habit. Punishment is worse than useless.

Boys may be irritated because they need circumcision, and girls because the clitoris is adherent. Every mother should see that the genital parts are carefully bathed every day; that the clothing covering these parts is clean and does not rub. If a child still continues to masturbate he should be examined by a physician.

Sometimes children, both boys and girls, are taught this habit by older children. This may be prevented by great care as to the associates of young children.

**Circumcision.** The foreskin may be so long and the opening so small at birth that urination is difficult and proper cleanliness impossible. This may lead to masturbation. Every male child should be carefully examined at birth for this condition. If it exists it should be corrected in very early infancy by stretching or circumcision.

**Poison Ivy.** Wash the skin thoroughly with plenty of mild soap as soon as exposed if it is known that poison ivy has been touched. Wet compresses of

magnesium sulphate (Epsom salts), all that will dissolve in water (saturated solution), will give some relief.

**Hives.** Hives are caused by eating some kind of food to which the person is "sensitive." Some persons cannot eat strawberries without breaking out in hives; others get them from eating fish; others from eggs, bananas, etc. The quickest relief is to clean out the bowel, eat lightly, drink more water, sleep plenty, and avoid the cause, if known; if not known, the mother should consult a physician who can discover the cause by certain skin tests. For the itching, bathe with soda water.

**Boils.** Your family physician should be consulted and the child placed under proper treatment in order to prevent a recurrence of boils. The child should have an abundance of sleep and eat freely of fresh vegetables, especially spinach, tomatoes, etc., and drink plenty of milk.

**Lice.** Even the cleanest children may get lice from other children at school. Wet the scalp and hair thoroughly with tincture of larkspur, tie in a towel overnight and shampoo the next morning. Coaloil and vaseline thoroughly mixed together and rubbed into the scalp and hair in the same manner is effective but not as pleasant to use.

**Itch.** This also may be caught at school. Obtain a sulphur ointment from the physician and use as directed. Every bit of clothing and bed linen should be thoroughly boiled and sterilized or the child will reinfect himself.

**Poisons.** Here again prevention is better than cure. Do not keep poisonous drugs in the house. If kept for a special purpose, throw what is left away. Lye, muriatic acid or other poison should be carefully put away.

In general the first thing to do when it is feared that the child has swallowed poison is to call a physician. Then get rid of the poison or as much of it as possible. Make the child vomit by drinking quantities of warm water; force the water down until it comes back. This is better than a strong emetic, as it thoroughly washes the stomach and the child does not retch and strain so hard.

Salt, mustard, oil or almost anything can be added to the water to make the child throw it up more quickly. It is the water, however, which does the work.

If an irritant poison has been swallowed, which has burned the lining of the throat, give, as soon as vomiting has stopped, the white of egg, milk, cream or starch water to soothe the raw surface.

If lye or other alkaline has been swallowed, give vinegar and water or lemon juice to stop the action.

If carbolic acid has been taken, give alcohol and water, or anything which contains alcohol, if possible to obtain, as this will instantly stop the action of the acid. If nothing containing alcohol is at hand, give anything which is fermenting—cider, yeast, vinegar mother, etc.

Do not cause vomiting if carbolic acid has been swallowed. Give white of egg, skimmed milk, starch.

**Phosphorus.** Children sometimes eat match heads or rat poison and get phosphorus poisoning. *Do not give oil or grease, as it hastens absorption of the poisons.* Give starch, egg, lime water, flour and water.

**Strychnine.** Strychnine tablets are often used as a stimulant in severe illness, and children have been known to find and eat a number at a time. Wash

out the stomach freely and keep the child very quiet in a still, dark room. It will be very easily thrown into convulsions. Get a physician with all speed.

*Opium.* The effect of opium preparations, such as morphine, paregoric, laudanum, codein, heroin, etc., is just the opposite to strychnine. The child will be stupid and hard to arouse, the pupils of the eyes will be very small and the breathing very slow. Give stimulants, such as black coffee or aromatic spirits of ammonia, one-half to one teaspoonful in water, keep moving and rub the skin of the body while the physician is coming.

**Drowning.** Hang the body head down until all the water has run out of the mouth that will. Place face down, with roll of something under waist line just below the ribs. Turn face to one side, pull tongue well forward, and have someone wrap fingers with a cloth and hold it. Straddle the hips, spread the hands to cover the small of the back, thumbs together, heels of the palms against the back just above the waist line. Then press suddenly and firmly against the body in such a way as to force the air out of the lungs. Count regularly and slowly—one, two; one, two—down two counts, up two counts, so the air can rush in and out of the lungs about as fast as in ordinary breathing.

This is "artificial respiration." Keep this up steadily, regularly and ceaselessly for several hours if life does not return sooner. Life has been restored in this manner after hours of effort.

If help is present, have the body warmly covered and rubbed while this is going on. As soon as breathing is restored, give warmth, rest and stimulants.

## Chapter XX

### SEE THAT THE BIRTH OF YOUR BABY IS REGISTERED

It is of the utmost importance to have the birth of your baby promptly and properly registered. This should be done within thirty-six hours after the baby's birth.

In Kansas the physician, midwife, nurse, or other attendant is required by law to report the birth, within ten days from the time of birth, to the local registrar, who will see that the date of birth and the child's name, with other related facts, are made matters of public record. Birth registration is necessary in order to prove, among other things, the child's age and citizenship, his right to go to school, his right to work, to inherit property, to marry, to hold office, to obtain passports for foreign travel, and to prove his mother's right to a pension, if she is a widow. Parents should make sure that this protection of fundamental rights is assured to every child born to them. If there is any doubt about whether the birth of a child has been registered, an inquiry may be sent to the State Board of Health at the state house in Topeka, Kan., where the records are filed. If the birth occurred before October, 1928, a fee of twenty-five cents is required, either for searching the records or for an age certificate which is adequate for school entrance. For a certified copy of a birth certificate, the fee is fifty cents. These fees are established by state law. If the birth has not been reported the vital statistics division will furnish a blank to be filled out and returned. It is suggested that a memorandum be made below of certain facts recorded in the birth certificate.

Baby's name .....

Father's name .....

Mother's maiden name.....

Sex of baby .....

If twin or triplet, give number in order of birth.....

Date of baby's birth.....  
(Month) (Day) (Year)

Birthplace:

City, town, or village.....

County .....


State .....

Attending physician:

Name .....

Address .....


Baby's registered number.....

  
**THE UNITED STATES OF AMERICA**  
 DEPARTMENT OF COMMERCE  
 BUREAU OF THE CENSUS  
 WASHINGTON

## Notification of Birth Registration

This certifies that the following Record of Birth is registered and preserved in the office of the State Registrar of Vital Statistics at  
**TOPEKA, KANSAS**

Name John Stephen Jones Sex Male No. 289-29830  
 Date of Birth Apr. 15, 1937 Place of Birth Topeka, Kansas  
 Name of Father John Franklin Jones  
 Maiden Name of Mother Virginia Nathali Shreve

  
W. L. Austin  
 W. L. Austin, Director of the Census.  
E. D. Miller, M.D.  
 Special Agent, Bureau of the Census.

U. S. GOVERNMENT PRINTING OFFICE 1934

3652

A notification of birth registration (see above) is sent free to parents of all children born in Kansas, upon receipt of the birth certificate in the office of the state registrar. If you have not received notification that the birth of your child is registered, find out why.

## Chapter XXI

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### WEIGHT AND GROWTH

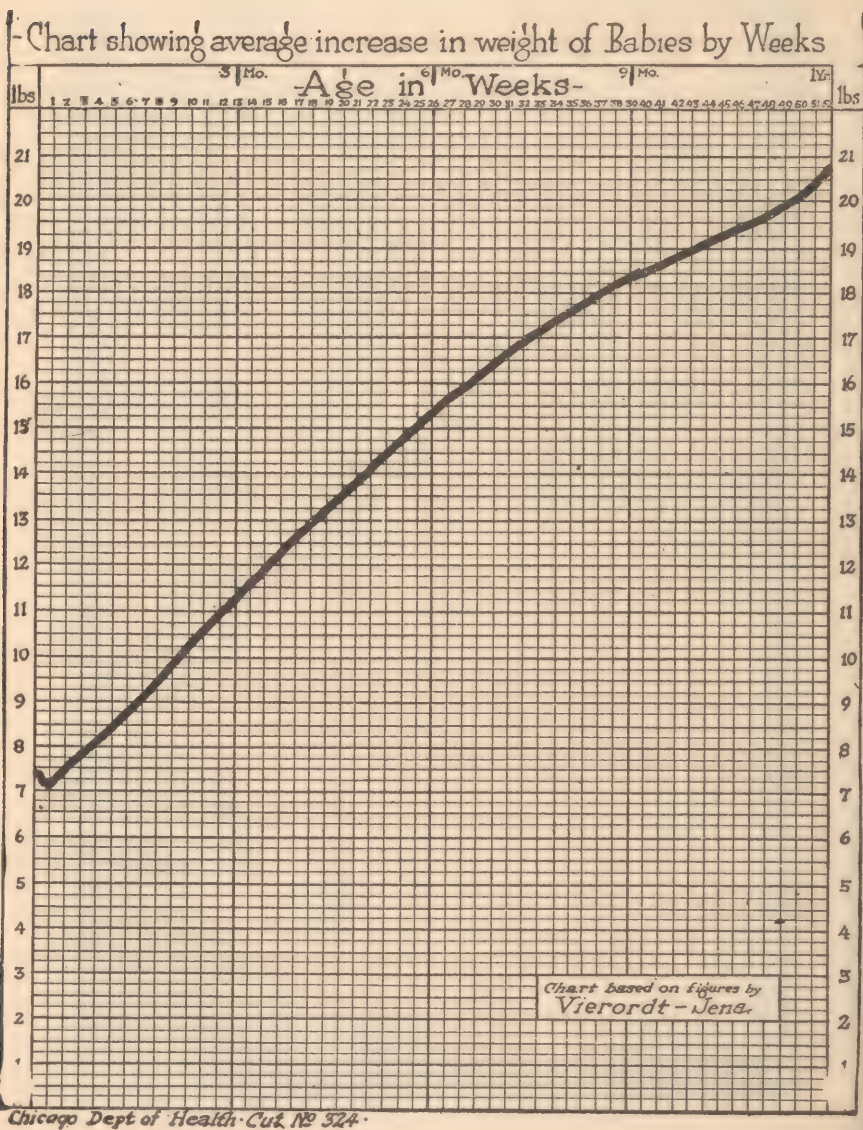
**Importance of Weighing.** Increase in weight is the surest index to growth. The infant should be weighed once each week, on the same hour and day of the week, until one year old; then once each month until entirely grown.

The weight tables in this book have been made by averaging the weights and heights of many thousands of children. A child who is as much as ten percent underweight or twenty percent overweight may have something the matter, which should have immediate attention.

No family should think of raising children without scales and a monthly weight record of every child. No mother should fail to keep a weekly weight chart of her nursing baby. The weight chart indicating the need for a change in formula may save the life of the bottle-fed baby.

Fill out the weight curve in this book for the child less than one year of age, and use the monthly weight record for the older children. If in doubt as to how to make a weight curve for the baby the mother should ask a nurse or physician to show her how to start it.

After the first week no child should ever lose weight. All children, however, have periods of slow and fast growth, and the growth line will not be a straight line.



## Notes on Development of the Baby

BABY'S NAME .....

	Weight.	Height.	Held up head.	Sat up.	Cut teeth.	Crept.	Stood alone.	Walked.	Spoke first word.
Birth . . . . .									
1st month . . . . .									
2d month . . . . .									
3d month . . . . .									
4th month . . . . .									
5th month . . . . .									
6th month . . . . .									
7th month . . . . .									
8th month . . . . .									
9th month . . . . .									
10th month . . . . .									
11th month . . . . .									
12th month . . . . .									



### Weight-height-age Table for Girls from Birth to School Age

[illegible]

### Weight-height-age Table for Boys from Birth to School Age

[illegible]

Height and Weight Table for Girls

Height inches.	5 yrs.	6 yrs.	7 yrs.	8 yrs.	9 yrs.	10 yrs.	11 yrs.	12 yrs.	13 yrs.	14 yrs.	15 yrs.	16 yrs.	17 yrs.	18 yrs.
39	34	35	36											
40	36	37	38											
41	38	39	40											
42	40	41	42	43										
43	42	42	43	44										
44	44	45	45	46										
45	46	47	47	48	49									
46	48	48	49	50	51									
47		49	50	51	52	53								
48		51	52	53	54	55	56							
49		53	54	55	56	57	58							
50			56	57	58	59	60	61						
51			59	60	61	62	63	64						
52			62	63	64	65	66	67						
53				66	67	68	68	69	70					
54				68	69	70	71	72	73					
55					72	73	74	75	76	77				
56					76	77	78	79	80	81				
57						81	82	83	84	85	86			
58						85	86	87	88	89	90	91		
59						90	91	93	94	95	96	98		
60						90	94	95	97	99	100	102	104	106
61							99	101	102	104	106	108	109	111
62							104	106	107	109	111	113	114	115
63							109	111	112	113	115	117	118	119
64								115	117	118	119	120	121	122
65								117	119	120	122	123	124	125
66								119	121	122	124	126	127	128
67								124	126	127	128	129	130	131
68								126	128	130	132	133	134	135
69								128	131	133	135	136	137	138
70									134	136	138	139	140	141
71									138	140	142	143	144	145
72										145	147	148	149	150

Compiled by D. T. D. Wood, Columbia University.

Height and Weight Table for Boys

Height inches.	5 yrs.	6 yrs.	7 yrs.	8 yrs.	9 yrs.	10 yrs.	11 yrs.	12 yrs.	13 yrs.	14 yrs.	15 yrs.	16 yrs.	17 yrs.	18 yrs.
39	35	36	37	....	....	....	....	....	....	....	....	....	....	....
40	37	38	39	....	....	....	....	....	....	....	....	....	....	....
41	39	40	41	....	....	....	....	....	....	....	....	....	....	....
42	41	42	43	44	....	....	....	....	....	....	....	....	....	....
43	43	44	45	46	....	....	....	....	....	....	....	....	....	....
44	45	46	46	47	....	....	....	....	....	....	....	....	....	....
45	47	47	48	48	49	....	....	....	....	....	....	....	....	....
46	48	49	50	50	51	....	....	....	....	....	....	....	....	....
47	....	51	52	52	53	54	....	....	....	....	....	....	....	....
48	....	53	54	55	55	56	57	....	....	....	....	....	....	....
49	....	55	56	57	58	58	59	....	....	....	....	....	....	....
50	....	....	58	59	60	60	61	62	....	....	....	....	....	....
51	....	....	60	61	62	63	64	65	....	....	....	....	....	....
52	....	....	62	63	64	65	67	68	....	....	....	....	....	....
53	....	....	....	66	67	68	69	70	71	....	....	....	....	....
54	....	....	....	69	70	71	72	73	74	....	....	....	....	....
55	....	....	....	73	74	75	76	77	78	....	....	....	....	....
56	....	....	....	77	78	79	80	81	82	83	....	....	....	....
57	....	....	....	....	81	82	83	84	85	86	87	....	....	....
58	....	....	....	....	84	85	86	87	88	89	90	91	....	....
59	....	....	....	....	87	88	89	90	92	94	96	97	....	....
60	....	....	....	....	91	92	93	94	97	99	101	102	....	....
61	....	....	....	....	....	95	97	99	102	104	106	108	110	....
62	....	....	....	....	....	100	102	104	106	109	111	113	116	....
63	....	....	....	....	....	....	105	107	109	111	114	115	117	119
64	....	....	....	....	....	....	....	113	115	117	118	119	120	122
65	....	....	....	....	....	....	....	....	120	122	123	124	125	126
66	....	....	....	....	....	....	....	....	125	126	127	128	129	130
67	....	....	....	....	....	....	....	....	130	131	132	133	134	135
68	....	....	....	....	....	....	....	....	134	135	136	137	138	139
69	....	....	....	....	....	....	....	....	138	139	140	141	142	143
70	....	....	....	....	....	....	....	....	....	142	144	145	146	147
71	....	....	....	....	....	....	....	....	....	147	149	150	151	152
72	....	....	....	....	....	....	....	....	....	152	154	155	156	157
73	....	....	....	....	....	....	....	....	....	157	159	160	161	162
74	....	....	....	....	....	....	....	....	....	162	164	165	166	167
75	....	....	....	....	....	....	....	....	....	....	169	170	171	172
76	....	....	....	....	....	....	....	....	....	....	174	175	176	177

Compiled by D. T. D. Wood, Columbia University.



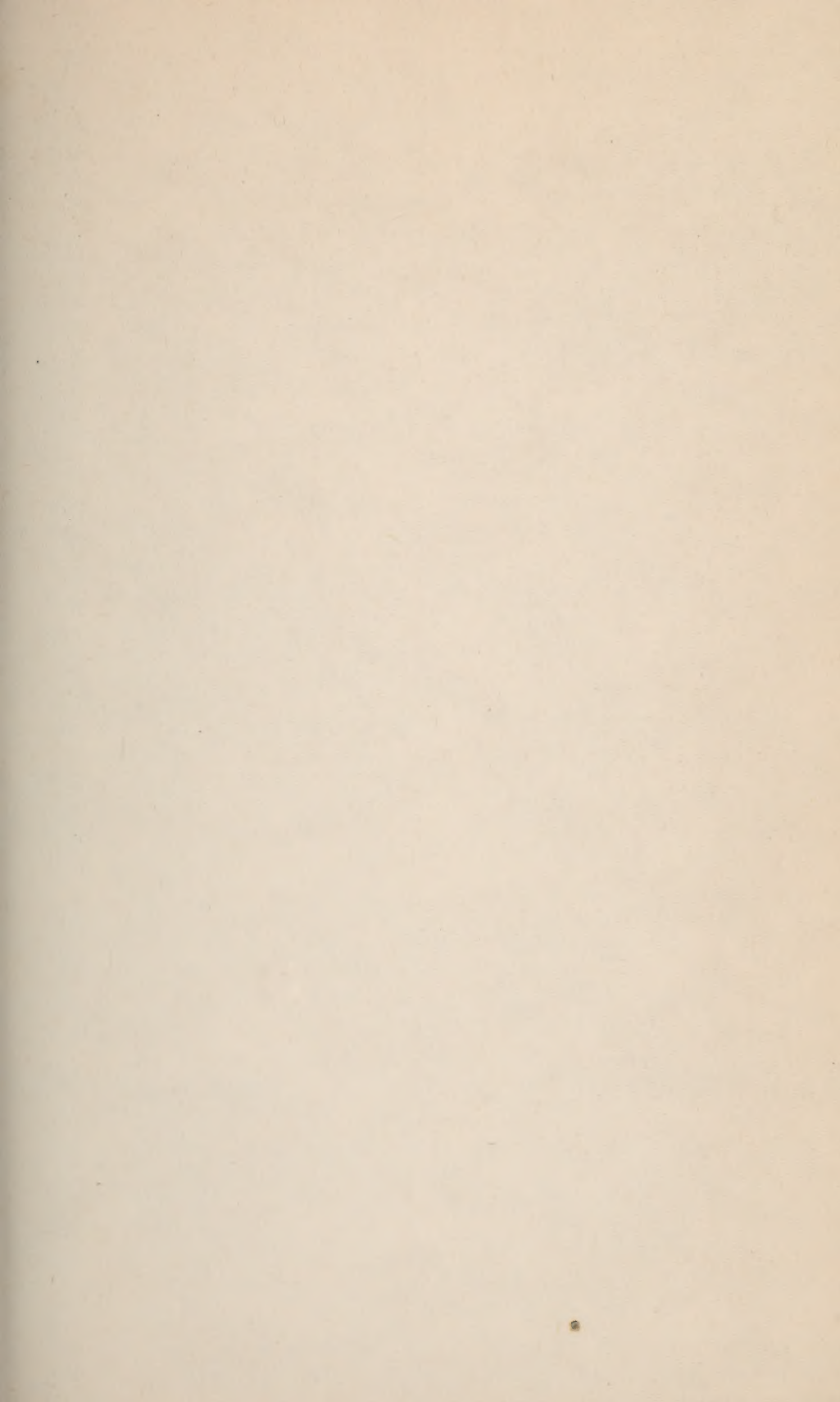


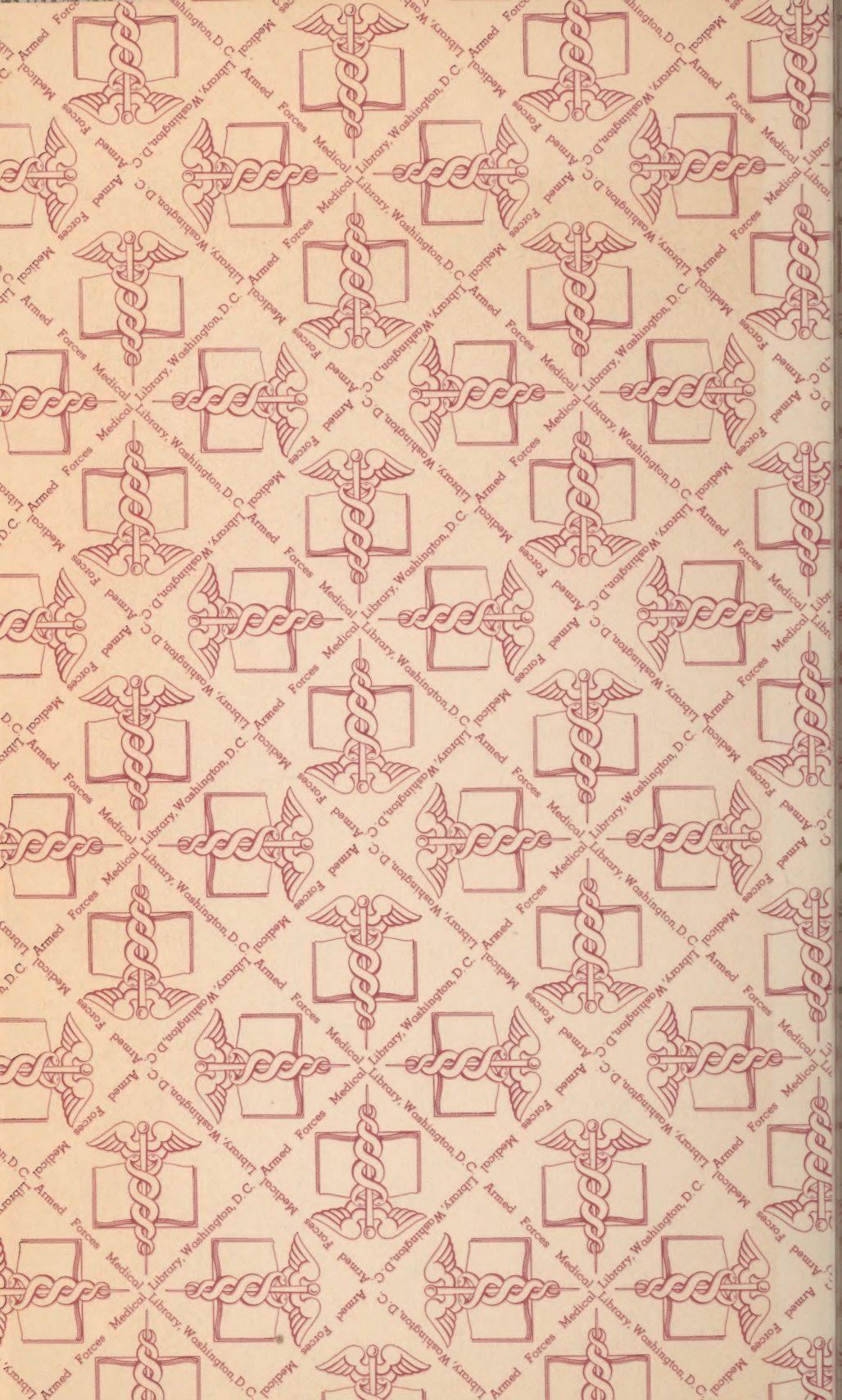














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